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THE MONROE PALACE, RIO DE JANEIRO, NAMED IN HONOR OF THE MONROE DOCTRINE, IN THIS BUILDING
THE MEMORABLE MEETINGS OF THE PAN AMERICAN CONGRESS WERE HELD IN 1906, DURING THE
IMPORTANT VISIT TO BRAZIL OF UNITED STATES SECRETARY OF STATE, ELIHU ROOT.

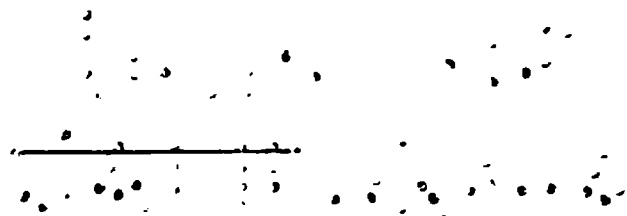
ILLUSTRATED SOUTH AMERICA

A Chicago Publisher's Travels and
Investigations in the Republics of
South America, with 500 Photo-
graphs of People and Scenes from
the Isthmus of Panama to the
Straits of Magellan

By

W. D. BOYCE

Publisher of the "Chicago Saturday Blade"
and the "Chicago Ledger"



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TO VINDI
MAGNUS

INTRODUCTORY

IN ORDER to judge a piece of work fairly, one should know the conditions under which it was done. To any one who may feel inclined to question the manner or matter of these pages, I would like to state that the contents of this book was originally "newspaper copy," prepared under extremely differing conditions of time, scene and place. The articles were written, not in the quiet of a library, but "in the field," necessarily varying in style and quality, with the influences of the time and surroundings entering into them. They were written from sea level to 18,000 feet among the clouds; from the equator to fifty-six degrees south latitude; from regions where rain never falls to regions where the rainfall is one hundred and fifty inches per annum; from sections where men wear fur overcoats to sections where men wear almost no clothing at all; they were written on every sort of water craft from ocean-going vessels to the crude *balsas* of the Amazon headwaters; on almost every species of rail vehicle from a luxurious private car to a "caboose" filled with peons; one was written in the midst of an earthquake in Peru, others in the midst of a Paraguayan revolution; some were written in wild Indian-inhabited forests of far interior Ecuador, others on the silent wheat plains of Argentina, and others among the coffee plantations of Brazil; they were often written sitting up in bed at midnight or on "joggling" trains in heat and dust, and sometimes in the quiet of hotels that were much like palaces; they were written from information gathered all the way from the negative and affirmative grunts of Indians to notes made while interviewing the President of every South American republic. Hence the reader need not be surprised should he find the matter "newsy" rather than historic, and the literary manner as uneven and changeful as the country and experiences through which the writer passed.

The fact that human progress has followed the sun's course long since gave rise to the famous phrase, "Westward the star of empire takes its way." Round the world from old Asia, pressing forward through thousands of years, the rising tide of civilization has followed the sunset; across Western Asia, Continental Europe, through the British Isles, across North America to the Pacific coast, across the ocean to Japan, and across Japan to China, in old Asia, where modern progress is now sweeping away the ancient order of things. Having completed the circle of the globe, the human stream of civilization is broadening, flowing off into the open spaces, chiefly to the southward. In Africa and South America is found the greatest amount of open or sparsely settled space; toward those fields the human tide of power and progress is flowing. Will we presently be saying, "Southward the star of empire takes its way?" Perhaps. Certainly, in the centuries to come, in Africa and South America great nations will flourish, possibly greater nations than the world has ever known; hence, those continents and their opportunities and present state of development become vastly important and interesting.

Because the greater part of South America lies in the tropics, the very thought of it arouses the imagination. Like Africa, it is a country of astounding contrasts, and for that reason invites and interests the traveler. Topographically, South America contains enormous table-lands that are beautiful and tillable, contrasted with almost impassable mountain ranges and miasmatic lowlands and vast forest-choked valleys; politically, in some sections statesmanship has changed once chaotic elements into peace and order, in other regions the violence of revolution is still in action; socially, there is every contrast conceivable from semi-barbarism and peonage to refinement and riches, and from bloody outlawry to the unselfish followers of the Man of Galilee. Hence this quarter of the world is exceedingly interesting to read about.

There are numerous special aspects of South America that attract travelers. In truth, one can find unusual material there for almost any sort of investigation. If one has a preference for the study of ancient human groups one can investigate, for instance, the strange story of the ancient Incas of Peru, or the

Chibcha Indians of Colombia, who seem to have been highly civilized when they were discovered, centuries ago, and who investigators have thought were, possibly, colonies from pre-historic Atlantis, the fabled continent that Plato says was submerged in the Atlantic Ocean. If one wishes to study the history and effects of conquest, one will find the descendants and influences of the Spanish conquerors everywhere in South America; if one wants to compare and estimate the effects of peace and war, one can find regions torn and ruined by violence and revolution, as well as regions that are peaceful and exceedingly prosperous; if one is a naturalist, he can find beasts and birds, snakes and bugs, and flowers and trees in South America that grace, or disgrace, as the case may be, no other part of the planet; if one cares to study men and women one will find very handsome human "specimens," both male and female, in South America, as well as numerous samples of the *genus homo* that are an affliction to the eye and a shock to the mind. Personally, I was chiefly attracted to South America by the feeling that it is to constitute the world's next great arena of human activity and development. I wished, chiefly, to examine its tillable areas, to study its natural resources, to estimate its business opportunities, to see what the people were like, what were their wants and customs and how the population was distributed, and whether or not the business men of the United States were getting their natural and rightful share of the trade of this neighboring half of the hemisphere.

Few people, I believe, appreciate the radical difference between the basic human stock of South and North America. The Indian race in the southern half of the hemisphere was always, by reason of dissimilar food and environment, different from the red race of the North; also, the original pioneer white men of South America and North America were totally different in origin, aim and character. The North American Indians were a robust meat-eating race, who flourished in a land filled with deer, antelope, buffalo and many sorts of game. They lived by killing things, and grew big and savage. The South American red men developed in a country almost destitute of game, hence they were of necessity vegetarians; there being very little to kill for food, they learned to till the soil. As a

consequence, though less robust, they became in favorable regions semi-civilized. Turning to the white man's basic stock in North America, we find an honest and pious people, who had fled from religious or political persecution, while the pioneer white stock of South America was, to be truthful, simply a body of Spanish and Portuguese cutthroats and robbers. The South American people developed from a fusion of the blood of the Indians and these Portuguese and Spanish daredevils, while we beat back our Indians and refused to fuse with them. The contrast of origins is sharp and clear, the results natural and instructive. We have developed a great nation with but one real revolution and but one internal war; the South Americans have passed through scores of wars and hundreds of bloody revolutions. In regions there are still disturbances, but the racial fire is dying down under civilization, the old Spanish-Indian blood is beginning to cool. Yet, they remain a distinctly "spicy" and picturesque people, and their condition and achievements are entirely worth studying.

To a son of Uncle Sam it is hardly possible to consider the southern half of the hemisphere without thought of the "Monroe Doctrine," that strong unwritten law which says that the Americas are strictly for Americans, that no monarchical Government of the Old World shall gain further foothold in the New. The idea itself, no doubt, had been long growing among the American people, but when President James Monroe, in his historic message of December 2d, 1823, flatly announced it, the world was astonished. The position he took was that American policy was and had been not to interfere in the Governmental affairs of the nations of Europe, and that a like attitude on the part of European Governments toward the republics of the Western World would henceforth be demanded. At that time the reactionary Holy Alliance was tightening its grip on Europe, and it looked as if the Great Powers might countenance Spain in an attempt to reconquer her revolting colonies in the Western Hemisphere. Monroe's edict put an end to Spain's dream of re-conquest. After that the republics of South and Central America stood secure with the United States behind them. With the United States virtually pledged always to come to their aid at any time should

danger threaten them from the Old World, I believe they will continue to stand secure until they have worked out their destiny. After my long journey and investigation of South American countries, I am more than ever impressed with the timely wisdom of Monroe's decision and the necessity of continuance of his famous "doctrine."

Before going to South America I confess that my knowledge of that collection of republics, as with most busy Americans, was not very deep or accurate; besides, having read for the most part about their weakness for revolutions, I was not inclined to think much of them. However, after over forty thousand miles of travel and over a year spent in actively studying all parts of the South American continent, I returned deeply impressed with the vastness of the resources of that country and with grateful and pleasant appreciation of many of its people.

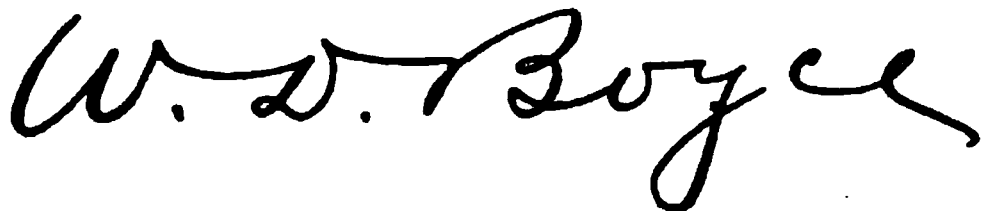
Something written by a traveler in South America may have furnished the first real impulse that resulted in my long journey. He said: "The physical features of South America are on a more gigantic scale than in North America. Its mountains as a rule are higher, its rivers broader and deeper, its forests more impenetrable, and these features have presented obstacles to man which have daunted and delayed him in the conquest of the country. It is as if this continent were waiting for a later race of giants, who with scientific and mechanical skill superior to any yet achieved, shall be able to subdue this richest of all continents, which yet guards its wealth so securely." It occurred to me that the "later race of giants, with superior mechanical skill," had perhaps already been born in the racial melting pot of the United States, and ultimately might aid materially in the predicted development. Hence my conclusion to "spy out the future land of promise," and embody the impressions of what I saw and heard in letters to the 5,000,000 readers of my newspaper, *The Chicago Saturday Blade*, and finally to incorporate them in a book that might prove useful to others.

In assembling my party I reversed the policy followed in my African shooting and photographing expedition. In that country I had a very large party (nine white men and four

hundred porters), but I determined to go to South America "light," and, both in luggage and human units, equipped solely for efficiency. In leaving the United States I attached to myself a secretary, Mr. W. N. Gulick, of Washington, D. C., who spoke Spanish, a South American photographer, Jorge Goytesola, of Lima, Peru, and Charlie Pollinaise, my personal servant, who was born and reared in the West Indies and spoke Spanish, French and several Indian dialects. The United States Department of State having furnished me with letters to our several legations in the South American republics, and having many personal letters to South Americans from my old college friend, Charles M. Pepper, Assistant Secretary of State, who had spent a year in South America, I took passage from New Orleans on December 21, 1910, bound for Colon on the Isthmus. I was going on a very long journey indeed. As planned, I would skirt Central America on the east, cross the Isthmus at the Panama Canal, enter the Pacific and go down the west coast of South America, journeying into the interior of the republics of Ecuador, Peru, Bolivia and Chile, then take passage through the Straits of Magellan to the Falkland Islands in the Atlantic, thence northward to Argentina and Uruguay, Paraguay and Brazil, then up the mysterious Amazon River, and finally to the Guianas, Venezuela, Colombia, and thence to the United States. How nearly I achieved this rather ambitious undertaking the reader may judge by turning the pages that follow.

To my secretary, photographer, and servant, I wish to express my heartfelt thanks for their faithful assistance, often under very trying circumstances.

Very truly,

A handwritten signature in cursive script, reading "W. D. Boyce". The signature is written in dark ink and is positioned below the typed name "W. D. Boyce".

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ILLUSTRATED SOUTH AMERICA

PANAMA CANAL ZONE

Canal Zone area, 448 square miles—United States paid Republic of Panama \$10,000,000 for it—Panama Railway, 48 miles long, owned by United States—Canal 50 miles in length; estimated cost \$400,000,000, probable final cost over \$700,000,000—People employed in Canal construction approximately 35,000, total population within Canal Zone about 75,000.

CHAPTER I.

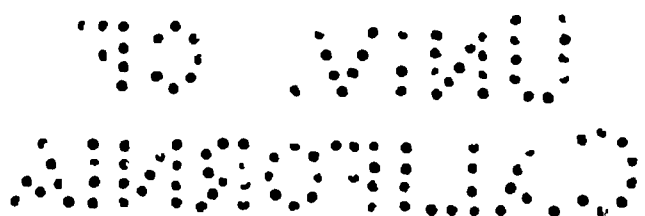
SOUTHWARD BOUND.

IN LEAVING the United States I took passage for the Isthmus by what is known as the "long route," that is to say, a sea course that leads along the coast of Central America's five republics, one colony of Great Britain and one State of the Mexican Republic. I was going to investigate the conditions and resources of South America, yet I watched with keen interest the shore line and coast towns of the Central American republics as we passed by them.

It is only human to be curious about our neighbors, and the nearer the neighbors live to us the more eagerly we watch for moments when their window shades are up.

At present I will only remark that Central America is reputed to be the real home of revolutionists, earthquakes, volcanoes, bananas, tarantulas (both human and entomological), and much pleasant sunshine. But it must not be forgotten that these things also flourish still farther south. After two days on the Gulf of Mexico, the first land we sighted was the State of Yucatan, the southeastern corner of (now) Mexico. The coast is low, without harbors, and thinly settled.

Presently we came to British Honduras, a small country.



but well governed from England, and with one port of some importance. It is called Belize. The grand sport of getting up revolutions is distinctly unpopular in this country, and the people are prosperous and at peace. Next we came to Guatemala, the most progressive of the Central American republics. In Guatemala they take no chances on revolutionary fires breaking out. The method they employ to "squelch" such perils, though drastic, is very effective. As soon as the Government suspects that an individual harbors a desire to start a revolution they promptly take that person out and shoot him. It saves a deal of trouble and anxiety, and the Government, no doubt, figures that in the end it also saves a great many human lives. All telegrams and cablegrams are censored by the Guatemalan Government, and it has refused to permit a wireless cable station to be installed in the country, being evidently afraid it could not tell what messages might be transmitted. It seems a bit "hidebound," doesn't it? But they do not have revolutions and are quite prosperous. We stopped at Barrios, the only port on the eastern coast, where we landed mail and passengers. Fourteen of our twenty-four passengers disembarked here to hurry home, the following day being Christmas.

We spent Christmas at sea off the uninviting coast of Spanish Honduras. It looked to be a "tipped and tumbled country." A famous Honduranian once tersely illustrated the topography of his country when he crumpled up a sheet of paper and threw it upon his desk and said: "That is an outline map of Honduras." We stopped at Puerto Cortez, the principal seaport on the Atlantic coast, and learned that the inhabitants of the country were just then, as usual, busy with a revolution, the "ins" having canceled all the commercial concessions of the "outs," thus exciting another tempest in the much shaken Spanish Honduran teapot.

Six hundred miles after that we were off the coast of Nicaragua, where a successful revolution was fought out three years ago. During the progress of that historical ruction the United States Government seemed rather partial to the "outs," and when the "outs" became the "ins" Uncle Samuel adroitly tucked the new President and his Government under the protecting wing of the American eagle. The significance of this is

that if they do not behave themselves Uncle Sam will have to step in and straighten things out. Ultimately this will probably occur.

On board our ship there was, naturally, a great deal of discussion, pro and con, relative to the Panama Canal. Usually the "pros" seemed to have the best of the argument. The question frequently arose as to what nationality of men were the best fitted for digging the big ditch, and I recall a story that was told. Said one Irishman to another: "Say, Patrick, what is this they be tellin' me? I hear ye are thinkin' of goin' down to work on the Panama Canal?"

"I am," replied Patrick.

"Sure," said the other, "but you'll find it very hot down there, as much as 115 degrees in the shade, they tell me."

"Well, what of it?" said Patrick. "Ye don't think I'll be fool enough to work in the shade all the toime, do ye?"

An interesting gentleman, seated next to me at the Captain's table, during the voyage, was formerly President of the Republic of Costa Rica. From him I gathered much valuable information relative to his country. He had been long absent, and admitted that he was returning with a broadened mind, and with the hope that his countrymen could be induced to see that there was more to be gained by pushing affairs along commercial lines than in perpetually wrangling over the offices.

I am prompted at this point to speak critically of the peculiar policy of my own country in the matter of ocean commerce, since the vessel on which I sailed was a representative illustration of the absurdity of that policy. The vessel was owned by the United States Fruit Company, a United States corporation, commonly called the "Fruit Trust." This corporation owns and sails under *foreign flags* over ninety ships. These were built abroad, mostly in Scotland, and cost about two-thirds of the price of ships of equal tonnage and quality if built in American ship yards. In order to avoid the payment of duties imposed by the United States they fly foreign flags, and have officers who are citizens of and carry papers of foreign countries. Yet our United States ship yards compete with and undersell foreign countries in building ships for foreign navies!

UPPER PICTURE, THE PANAMA CITY RAILWAY STATION. LOWER PICTURE, A VIEW IN PANAMA HARBOR.

This is a United States corporation, selling all its fruit in the United States, and controlling the tropical fruit market as completely as the Standard Oil Company has controlled the oil business. In the event of war with a foreign nation this "Fruit Trust," being a United States corporation, would demand and receive protection for its shore property from the strong arm of the United States. It is rather an anomaly, isn't it? Captain Lamb, our ship's chief officer, was an Irishman; her purser, a Scotchman; her chief cook, an Englishman; her flag, British; and her firemen all Chinamen. Doubtless all the company's ninety vessels are similarly manned. The questions that arise are these:

1. Why should the ships of a United States corporation fly foreign flags?
2. Why should our Government be called upon to protect the shore property in a foreign country of a Trust that has its ships built in other lands?
3. Why should not our laws be so made that it would be possible to build ships in the United States, fly the Stars and Stripes, and officer them with our own brave men?

During the two years immediately preceding my journey to South America, I had traveled more than fifty thousand miles on water, and in that time had been in many of the chief ports of the world, but with the exception of vessels belonging to our navy, and private yachts, I saw the Stars and Stripes floating over only three steamers! Only three, mark you, out of at least ten thousand ships that I saw in different ports and passed at sea.

Our navy, the second in the world, was built and is maintained chiefly on the theory that we should be able to protect our "merchant marine." But we have no merchant ships flying our flag to protect! One wonders if, as a people, we Americans are really as wise as we believe ourselves to be.

Arriving at Colon, the eastern doorway to the gigantic theater of the Panama Canal, we were soon busy inspecting the herculean task the United States has here set itself. After some riding about without seeming to get to the bottom of things, I was impressed with the fact that the only honest way to really examine the big ditch was to get right into it and

walk. An illustrative incident came to my mind. A small boy that I heard about wanted to buy a puppy, and went to a man who had some for sale.

"How much do you ask for your little dogs?" he asked politely.

"Two dollars apiece," replied the man.

"But I don't want a piece—I want a whole dog," was the boy's reply.

We were not after a piece of the canal, but the whole canal, so we walked more miles than the reader would probably believe in an effort to get the whole truth.

As an achievement the canal promises to be one of the major performances of the human race, and because the changes it will likely effect are beyond computation, I fancy that a few paragraphs relative to the history of the barrier here being pierced may seem worth the space.

For centuries it had been a foregone conclusion that some nation would ultimately try to cut through the obstruction placed by nature in the path of progress at Panama. England, Spain, Portugal and France, at different periods seriously considered or actually attempted the task. Balboa, famed in history as a great explorer and adventurer, touched at the Isthmus of Panama in the year 1501. He was a Spanish nobleman, who dissipated his fortune, and chose exile from his native land to escape imprisonment for debt. In 1510 he returned to the Isthmus, and, history says, married the beautiful daughter of a savage Indian chieftain, and thus became a great man in this wild country. A year later he made a journey into the interior from the Atlantic coast, learning from an Indian chief that there was an open sea farther toward the south. This journey occupied him twenty-three days, as he traveled over what is now known as the Caledonian Canal route. When Balboa returned to Colon his faithful Indian wife showed him a route across the Isthmus, farther to the east, and by this route, in 1513, he made another trip, discovering the Pacific Ocean. When Balboa reached the great ocean he drew his sword, waded into the water and claimed all it contained for his country and King.

Later he managed to take a small ship (it must have been

very small) across the Isthmus, by conveying it at one point ten miles across land. In 1884 Captain Eads, the great American engineer, attempted to organize a company to construct a canal and ship-railway, the latter to take the ships from the water, transport them across a section of land and then put them back into the water again. He was simply intending to attempt what it is said Balboa accomplished four hundred years before. His scheme was no doubt practical.

In those early days, when the existence of the Straits of Magellan was in doubt, the idea of a canal was advanced. The first advocate of such a scheme was a Spaniard named Saavedra, a follower of Balboa. He sent his plans to Charles V., King of Spain, who was favorably impressed, but hesitated on account of the vast expenditure of money involved. His successor, Philip II., was approached on the matter, and he asked the advice of the priests, who, it is said, killed the proposition by quoting, "What God hath joined together, let no man put asunder."

Antonio Galvao, a Portuguese navigator of note, tells in his book of his country discovering, about the year 1550, four possible routes for a canal, but the investigators reported such extreme difficulties in the way that Portugal went no further with the project.

After that the matter rested in quiet until the latter part of the eighteenth century, owing to the discovery of a passage at the south end of South America. Then Great Britain took up the idea that it would be of great value to her if she could control a passage through the Isthmus from ocean to ocean, and in 1778 she sent an expedition out under Lord Nelson to make a survey. The expedition, however, was not successful and the matter was finally abandoned.

Two concessions for building a canal were given by the Government of Colombia to Frenchmen, one in 1825 and the other in 1838, but both failed for lack of capital. In 1878 a company was formed in Paris by Ferdinand de Lesseps, the famous French engineer, and his company secured a concession from the United States of Colombia to construct a canal on any part of the Isthmus. De Lesseps convened a congress of engineers, which decided in favor of a sea-level canal from Limon

Bay to Panama Bay. It was thought the undertaking would cost \$240,000,000 and they estimated it would require twelve years to complete the canal. The company bought control of the Panama Railway, built by Americans, for \$18,000,000. This was a very large sum in those days. However, the fare across the Isthmus was \$25, and the road had paid in twenty-five years over 600 per cent profit.

De Lesseps had achieved great success in the building of the Suez Canal, and those interested with him were confident of his ability to repeat his success on the new project. He plunged into the work with great enthusiasm, but great as he was as an engineer, he lacked other qualifications necessary to combat successfully conditions that existed on the Isthmus. Deep in the plans of his great enterprise, he apparently paid no attention to the health of his men, sending them to work in the miasmatic swamps, where they died by thousands. No effort was made to improve the insanitary conditions that existed, and that alone was cause sufficient to doom the great undertaking.

But there was yet another reason for his failure. His en-

gineers and staff lived in the city of Panama, where they gave more attention to enjoying themselves than they did to building the canal. But the insanitary conditions were not only out in the swamps where the laborers toiled and died, but the gay city reeked with almost equally unhealthful surroundings. The officials and engineers failed to protect themselves from the germ-carrying mosquitoes, which inoculated them with yellow fever and many of them died as miserably as the laborers in the swamps.

De Lesseps had projected a sea-level canal twenty-eight feet deep, with a bottom width of seventy-two feet, and included a tunnel through the continental divide at

A CORNER OF ONE OF THE ANCON HOSPITAL BUILDINGS, PANAMA
CANAL ZONE.

Culebra. The currents, due to the difference in tides of the two oceans, were to be reduced by sloping the bottom of the canal on the Pacific side. The Chagres River was to be regulated by division channels and a dam below. Later, owing to the cost, a plan making locks necessary was substituted. Work was continued until 1889, when the company went into

bankruptcy, having spent \$300,000,000. It is said that one-third of this went for construction, one-third to the promoters in Paris, and one-third for the fast living of the officials and engineers.

A new French company took over the old company's rights, and continued enough work, principally in Culebra Cut, to keep the franchise. In 1904 our Government bought the rights, franchise and equipment, which for the most part was simply junk, for \$40,000,000. Colombia refused to extend to our country the other necessary rights and privileges, so Panama, then a province of Colombia, seceded and became an independent republic.

The United States made a treaty with the new republic which included the payment of \$10,000,000, and an annuity of \$250,000, the latter to begin nine years after the treaty was signed. The United States Government guaranteed the independence of Panama and secured absolute control of what is now called the Canal Zone, a narrow ribbon of land ten miles

ONE OF THE DREDGES ABANDONED BY THE FRENCH CANAL
COMPANY, PANAMA CANAL ZONE.

in width and forty-five miles in length, having an area of 448 square miles. The United States has jurisdiction over the water three miles from either shore of the Canal Zone. This means a perpetual lease of all governmental privileges in this territory. Its residents, however, do not acquire the rights of United States citizenship.

For the \$40,000,000 paid by the United States to the New French Canal Company we received the following:

Excavation by the French, useful to us, valued at \$27,500,000.

The Panama Railway Company, valued at \$7,000,000. This was a valuable acquisition, as it made transportation of materials easy. Forty-three thousand acres of land went with the railway property, and thirty-three thousand acres were acquired from the New French Canal Company.

Maps and technical data were valued at \$2,000,000; buildings, machinery, etc., at \$3,500,000, the whole totaling \$40,000,000, a really extravagant price. However, when a purchaser is compelled to have what another possesses just dealing is hardly possible. The people of the United States seemed to demand that the canal be built, and probably the best price obtainable was accepted in order that the work might proceed.

In studying the canal, I observed in many places French engines, dredges and other machinery, lying along the route of the old canal, overgrown with tropical vegetation and rusted beyond the point of usefulness. Possibly it might pay a junk firm to remove them, but about that there is some doubt.

For the \$10,000,000 paid to the Republic of Panama there was turned over to the United States, in addition to all public lands in the Canal Zone, one hundred and twenty thousand acres. Therefore, we own 70 per cent of the land in the Canal Zone, the remainder being owned by private citizens, mostly Panamanians. We exercise governmental rights over all. In point of fact, we paid ten dollars an acre for land worth ten cents an acre, but perhaps it was necessary.

An act passed by the United States Congress placed the building of the canal in the hands of the President of the United States, the direct functions to be administered by a commission of seven members, one member to act as chairman.

VIEWS IN THE PANAMA CANAL ZONE.

For convenience the operations have been under the direction of the Secretary of War. Until January, 1907, the work was preparatory—procuring machinery and equipment, fighting insanitary conditions, getting rid of yellow fever and malaria, reconstructing and double-tracking the Panama Railway, building houses for an army of five thousand Americans and some thirty thousand Spanish, Portuguese, Italian, negro and other sorts of laborers. Then a stable civil government had to be established with courts, schools, police and fire departments—in short, transforming a jungle full of germ-carrying mosquitoes and injurious vegetable life into a healthful place in which to work. The old French hospital at Ancon was rebuilt and equipped with everything of the best known to medicine and surgery, that the sick and injured might be properly cared for.

In this connection I would like to say that I believe the money spent, though almost fabulous in amount, will still have been well invested, since here has been demonstrated that any unhealthful tropical country can be completely freed from the diseases common to such a climate by the proper enforcement of the laws of sanitation, and protection from the ravages caused by the germ-carrying mosquito. The object lesson here given the world, and especially other South American republics, will ultimately have effect upon human progress in all the tropics and miasmatic regions, and the benefits accruing, finally, to humanity should not be put on a dollar basis.

All this preparation that I have mentioned took a lot of money and two years and a half of hard work. At the same time excavation was continued with the French tools, excavators, locomotives, dump cars and drills. Then modern American equipment superseded the inadequate French machinery, and since that time the work has gone on rapidly. I am presenting the reader with a good many pictures of the canal in course of construction, for the time will presently arrive when the locks will be completed and the great ditch filled with water; then these pictures will become historically valuable and of interest to the next generation.

But, after all, we really owe the building of the Panama Canal to three American heroes. Not such heroes as go to the front with flags flying and bands playing to face the bullets of

an armed foe, but just three quiet, brave army doctors, Reed, Lazarre and Carol. These men risked their lives when they allowed themselves to be bitten by infected mosquitoes in Cuba, and with the observations obtained before they died, aided science so greatly in the fight on the germ-carrying insects that it became possible to eliminate the dreaded pests from the Isthmus so completely that what had been the "hell hole" of the world became a place where white men can live and work in security. I think it a shame, however, that our Government never provided for the widows and families of these three doctors who died for all of us.

The canal, when we studied it, was partly completed, and after viewing it from Gatun Dam, Culebra Cut, and Pedro Miguel locks, and seeing the vast army at work with the great dredges and gigantic excavators, the immensity of the whole project was very nearly overwhelming. It made me feel somewhat like the cowboy who started across the Atlantic on the gigantic steamer, *Mauretania*. He was so awestruck by the enormous bulk of the steamer and the vast expanse of water that he was spellbound until some one inquired what he thought of it, when he solemnly replied, "This is sure some skiff on some creek!"

CHAPTER II.

THE CANAL ZONE AND ITS ORGANIZATION.

THE United States Government divides its administrative functions into two distinct branches, civil and military, in the Canal Zone. These governmental departments dovetail together so harmoniously that it is difficult for the ordinary observer to distinguish where one leaves off and the other begins. Yet, the reader will have some realization of the peculiarity of the situation when he considers that while the cities of Panama, with 30,000 population, and Colon, with 20,000 inhabitants, are within the boundary lines of the Canal Zone, over which flies the Stars and Stripes, they belong to the Republic of Panama, and Uncle Sam has nothing to say—out loud—about their government.

The Governor's duty is to enforce the civic regulations and laws of the Zone. The Canal Commission, the members of which are army and navy officers, except the Governor and Secretary of the Canal Zone, control the construction of the canal.

To Colonel George W. Goethals, chairman of the Commission, the "man who turned white" in his first three years of duty in the tropical heat, is due in great part the success of the construction and engineering work of the canal, and it is said that if he were not held back by our Government, two thousand miles away, in administering the canal affairs, work would go on faster and the canal would reach completion sooner and cost less.

The United States Government was, at the time of my visit, paying out \$1,500,000 each month to some thirty-five thousand canal employés. Americans and Europeans were paid in gold and the Chinese, East and West Indians and negroes were paid in Panama Republic silver, worth fifty cents on the dollar. Forty-two tons of silver were paid out monthly.

BUSY WORKERS ON THE PANAMA CANAL.

DUMPING CONCRETE AT A CANAL LOCK.

MR. BOYCE AT CAMP ELLIOTT, PANAMA CANAL ZONE.

Canal Zone revenues, collected by the Governor, have always exceeded civil expenditures. These revenues are obtained from real estate taxation and rentals, fines and liquor licenses. Saloons are allowed at certain points and the granting of licenses is under the control of the Canal Commission. The annual license is \$1,200 gold, and there are some thirty-eight saloons within the limits of the Zone. There is, of course, a business difference between the Canal Commission selling liquors and granting permits to others to do so, but the moral difference is not very plain to me. Result—the men get poorer liquor and more of it.

The Zone is well supplied with public schools, there being twenty-four in operation, and the education of the children seems to be quite as carefully looked after as in the United States. The white children have American teachers, who are paid from sixty to one hundred dollars a month, while the teachers of the colored children are educated Panamanians or West Indians. The children are allowed to ride free on the

SCENES IN THE CANAL ZONE.

3.

Panama Railway in going to and from school, to which, as an instance of "governmental paternalism," one certainly cannot object.

The fire department of the Zone would command the admiration of any one conversant with such departments, as it is equipped with engines of the most approved pattern. The horses are fine specimens brought from the States and South America, while the firemen are all men who were trained in the United States.

There are two hundred policemen in the Zone, one hundred of whom are white. These men are either ex-policemen from the United States or former sergeants of the United States army. The black policemen are recruited from the biggest and most intelligent of the Jamaicans. There is a large penitentiary at Culebra, and each police precinct has its jail. Convicts

are condemned to hard labor and are put to work constructing highways, a distinct example of progressive ideas.

I visited the United States marines at Bas Obispo (Low Bishop), where four hundred officers and men are stationed. The marines are the real guardians of Uncle Sam's property on the Isthmus, being ready to start at a moment's notice for any place in Central America, if a revolution should break out and they should be needed to protect our countrymen or their property.

The Young Men's Christian Association operates six clubhouses in the Zone, the buildings occupied having been erected and equipped by the Canal Commission. It costs one dollar a month to belong to the association, and as the clubrooms have gymnasiums, ice cream parlors, billiard rooms, bowling alleys, and good libraries, they are real homes to the white canal workers in their hours of recreation, a decided improvement over the old French order of things in this region.

The houses of the officials are built of wood, the porches

PEDRO MIGUEL TWIN LOCKS, PANAMA CANAL, LOOKING NORTH.

and windows being equipped with wire screens to keep out the insects. The houses are commodious, well furnished, and are made quite beautiful by the tropical flowers which surround them. One thing, however, is lacking to complete the picture of real homelike places. I refer to the absence of vegetable gardens.

To Colonel W. C. Gorgas and his assistants credit should be given for making it possible for men to live and work on the Isthmus without danger of yellow fever and other epidemics peculiar to a tropical climate. In the extermination of the mosquito nearly 3,000,000 gallons of petroleum oil were poured on the streets of the cities and towns, and into the lagoons and low places of the Zone, during the first year, and this plan has been continued ever since. In addition, the cities and towns were fumigated, tons upon tons of paper were used to plaster up the holes in the walls of houses, and every source of infec-

tion was destroyed. The natives of the Isthmus stood aghast at the "scouring and scrubbing" Uncle Sam's men gave the region, but as the United States was paying the bills they were content to keep their hands off and await the outcome.

The United States also paid for the installation of modern sewerage systems in the cities of Panama and Colon, and for the paving of their streets. Large, splendidly equipped hospitals were built at Ancon and Colon, and smaller hospitals at all settlements along the route of the canal. The lepers and insane had been housed at Miraflores, a station on the Panama Railway six miles from Panama City. Colonel Gorgas built new quarters for the insane at Ancon, and the lepers are now isolated in comfortable quarters up the coast. You see what admirable things may be done by a strong and honest man, when given power and backed up by a great nation.

The labor question in the Zone is one of the questions of the greatest importance and requires most skilful and arbitrary handling, as the laborers are a mixed crowd of many nationalities. While in Uganda, Africa, with my expedition, I was the guest of Archbishop Walker of the Church of England Mission, and I noticed that whenever a converted negro met a missionary on the road, or appeared before him at his residence, he always dropped on his knees. About the same relationship is sustained in the Canal Zone between the Government officials and the poor men who are really doing the work. The employés on the canal are not permitted to accept other employment, and if any one should attempt to hire any man working, or who wants to work, on the canal, whether the Canal Commission has employed him or not, that person is subject to fine and imprisonment.

In nearly every State in the Union it is unlawful for any manufacturer, mine owner, or employer of labor, to operate what is known as a "company store" to which their employés are given orders for goods, provided they have wages due them. Not so when your Uncle Samuel goes into business. Our Government owns all the stock in the Panama Railway, and the railway company operates a commissary department or "company store," and every employé on the canal and railway is given a "book," or credit for a certain amount on the com-

ABOVE, SPILLWAY AND FOUNDATION OF GATUN LOCKS. LOWER
PICTURE, LOOKING NORTH IN GATUN LOCKS.

missary department, where they spend their wages for the necessities of life.

In 1910 the "company store" cleared over \$200,000. How is that for protecting the employés who are digging the big ditch? The Panama Railway cleared over \$2,000,000 in the same year. Wouldn't you like to be a stockholder? The Panama Railway is the only railroad owned by the United States, and it is a monopoly, pure and simple, charging five cents a mile for passengers, and two cents a pound for every pound of baggage, *no baggage free*. It is a fortunate thing that the road is only forty-eight miles long. The policy applied on the Panama Railway will not make many converts to Government ownership of the railroads of the United States among those who are conversant with the operation of this monopoly, for if the United States were to take over the roads at home and pursue the same course employed in the administration of the Panama Railway, it would bankrupt the whole country to pay the rates charged for transportation.

All the hotels and boarding-houses in the Canal Zone are under the commissary department of the railroad, which means the United States Government. Everything is shipped in and all food is from cold storage. You eat frozen fish from the States, and yet the best fish in the world are taken right here in Panama Bay. In fact "Panama" is an Indian word meaning "many fish." The tropical fruit of Panama cannot be excelled, yet all fruit is shipped in from the United States. Green vegetables grow here as it were over night, yet everything you get is *canned*. This is the way a Government does business, at least in this case.

However, it seems to be a natural principle that good and evil shall mingle in all things earthly, and notwithstanding the disadvantages, the Tivoli Hotel, owned and operated by Uncle Sam, is better than many hotels in the United States, being clean, sanitary and up-to-date. The manager and assistants are from New York, Brooklyn and Dayton, Ohio; the head waiter from Nairobi, British East Africa; the barber, a German from the Philippine Islands; the waiters, negroes from Jamaica; the guests, all nationalities from everywhere.

It will not be difficult to fortify the canal on either the At-

UPPER PICTURE, CULEBRA CUT, LOOKING NORTH. LOWER PICTURE, GATUN UPPER LOCKS, LOOKING SOUTH.

lantic or Pacific shores. The channel is very narrow at Colon, so that seacoast batteries would have no difficulty in sinking battleships that might get by the submarine mines. On the Pacific a breakwater will run to Naos Island, five miles from the shore; adjoining are Perico and Flamenco Islands, and on Flamenco it is proposed to erect fortifications, and being high, it will easily command the entrance to the canal. The guns proposed to be used in the fortifications are ten 14-inch rifles, twelve 6-inch rifles, and twenty-eight 12-inch mortars.

There is no question but that the United States should have a naval base in the Canal Zone. A station here would be invaluable, especially for coal. The only navy yards and docks required within one thousand miles of the Zone should be built at Panama. With the immense machine shops left over from the canal work, when it is finished, we would need little more for a complete plant.

My personal opinion, is, however, that while it will do no harm to fortify the canal, it is a needless expense. The United States needs the money too much at home for internal improvements and waterways. Besides, the large expenditure necessary to fortify the canal would build, equip and maintain a fleet of airships and aerial planes *that could destroy every navy and fort in the world*. So I am inclined to propound the old query, "What is the use?"

I have observed several times in my life that when a new doctor supplants another in a case, the new doctor is very careful not to commit a breach of professional ethics, but is just as careful not to agree with much that the previous attendant said. Being a new "doctor" on the Panama Canal case, I dislike to be discourteous to any writer preceding me, but none the less I have several distinctly individual things to say. As an analyst seeking the truth, I am compelled to report my honest conclusions.

I did not go over the line of the canal in a private car, owned by the Canal Commission and used to show newspaper men around, but followed the big ditch from point to point in most part on foot; therefore, what I have to report is matter of personal knowledge.

On June 29, 1906, the construction of an eighty-five-foot

above-sea-level lock type of canal was authorized by Congress. The canal, when completed, will be fifty miles long, from ocean to ocean. To aid the reader in following my description of the construction of the canal the work may be divided into three classes :

First, wet excavation. That is to say, excavation performed by dredges, especially from deep water in the ocean to dry canal. Second, dry excavation. This includes all material, rock, earth and lava ash, removed by steam shovels and other power ex-

cavators, or by pick and shovel, there being very little done by pick and shovel. Third, a class of work that covers construction of locks, dams and spillways. The dams make the lakes, the locks enable the ships to pass from sea level to lake level, and *vice versa*, and the spillways take care of the overflow.

The construction work has been divided into three divisions. First, the Atlantic division, extending from deep water to Gatun Lake, including the Gatun locks and dam. Second, the central division, extending from Gatun to Pedro Miguel. Third, the Pacific division extending from Pedro Miguel to deep water in the Pacific Ocean.

The Atlantic entrance of the canal is in Limon Bay, and two large breakwaters are being constructed there. The entrance channel is at sea level. It is seven miles long, five hundred feet wide and continues to the Gatun locks. At Gatun the eighty-five-foot level is obtained by a great dam. The lake is confined on the Pacific side by a smaller dam between the hills of Pedro Miguel, thirty-two miles away. These dams will make the lake eighty-five feet above sea level, one hundred and sixty-four square miles in area. This lake does not exist at present and will not until the canal is finished, and the Gatun Dam begins to back up the Chagres River. It will be a fresh-water lake, and its level will be maintained at a constant height by the Chagres and Trinidad Rivers which flow into it. A big concrete-walled spillway takes care of the overflow.

Ships will pass from sea level to lake level, and *vice versa*, by a series of three adjoining locks, each with lifts varying from twenty-five to thirty feet, depending on the height of the water in the lake and the state of the tide.

The Gatun locks are in duplicate. They are in pairs, and have a width of one hundred and ten feet and a usable length of one thousand feet. Each lock consists of a chamber with walls and bottom of concrete, and water-tight gates at the end. The level of the water in the locks will be regulated by openings in the bottom and by operation of valves in the side and center walls, which allows water to flow into and out of the locks by gravity. To make them safe, five devices will be used. In all cases and at all times there will be not less than two barriers separating a high level from the level below.

There are two gates at the upper and two gates at the lower end of the upper lock. These double gates will be operated at the same time. Another safety device will be an enormous chain stretched across the lock near the surface of the water and passing around capstans on the walls. This will be so designed that by the application of frictional resistance it will arrest a ten-thousand-ton ship moving at a speed of three miles an hour.

The results of mishaps to the gates and locks are guarded against by movable dams above the upper gates. Each dam consists of a swing drawbridge from which wicket girders can be lowered one at a time, gradually lessening the area of the waterway, and is so designed that the flow of water through the locks with the gates open could be checked in less than an hour. These safety devices—twin locks, duplicate gates, cable protection and emergency dams—have all been successfully tried on different locks in the United States and abroad.

When vessels are passing through the locks under their own steam it is possible that signals may be misunderstood, and sometimes serious mishaps occur. At Gatun this possibility will be taken care of by electric locomotives running on the walls at the sides of the locks, which, under proper control, will tow ships through the locks, one locomotive on each side forward and astern. Ships thus towed will not be allowed to move their propellers.

The gates of the locks consist of two leaves, and are big steel structures, each leaf being seven feet thick and sixty-five feet long. Intermediate gates will be used to save water in locking small ships through, these gates being so arranged as to divide the locks into chambers five hundred and fifty feet and three hundred and fifty feet long. Ninety-five per cent of ships on the high seas are less than six hundred feet in length.

I was climbing a ladder from the bottom of the upper lock at Gatun to the wall above, when the chain of a bucket filled with rock broke and killed a laborer five feet from me.

Although the medical and sanitary force has done so much to decrease deaths and sickness on the Isthmus, fatalities from accidents are large, explosions of dynamite killing and injuring large numbers, in addition to the other accidents. In Bas

EFFECTS OF AN EARTHQUAKE IN CENTRAL AMERICA, SHOWING
WHAT MAY SOME DAY HAPPEN TO THE PANAMA
CANAL LOCKS.

Obispo Cut one hundred and eighty pounds of dynamite exploded, killing thirty-two men. In another accident, a Greek who had his arm torn completely off, climbed the hill from the cut and was halfway to the Bas Obispo hospital before he fainted. A negro who had his trousers blown off fainted and was carried to the hospital on a stretcher. When examined by the surgeons it was found that the only injury he had received was a slight sprain in both knees. It is somewhat difficult to secure information in regard to accidents and fatalities, as the work is divided into so many sections, and all news is censored, but conservative estimates placed the number of lives lost, up to the date of my visit, at two thousand.

Two million three hundred thousand yards of concrete will have been placed in Gatun locks and spillway when completed.

There have been installed two six-thousand-horsepower hydro-electric power plants in the Canal Zone. The amount of water possible to use in developing electricity will have to be determined by actual practice later.

The water supplied by the rivers is calculated as being adequate for all purposes. Nine months of the year the rainfall is ample; the other three months of the year there is no rain, therefore, enough water must be stored each rainy season to carry over the dry season. The big storage capacity of Gatun Lake, and additional storage up the Chagres River, will take care of this. It is intended to allow the water in the lake to rise to X 84 at the end of each rainy season, and it can lower five and one-third feet from this elevation without reducing the depths through Culebra Cut too low. Gatun Lake alone will store five feet of water in the rainy season that can be used in the dry season.

The tonnage passing through the Suez Canal is about twenty-one million gross tons per year; through the American Sault Ste. Marie (Soo) forty million gross tons. It is calculated that the Panama Canal will have enough water supply for as many lockages per day as can be passed through the canal,

OLD DREDGES ABANDONED BY THE FRENCH
CANAL COMPANY, PANAMA
CANAL ZONE.

which is estimated to be forty-eight for the twin locks. This would amount to eighty-one million gross tons per annum. The Panama Canal cannot hope to pass more than eight million tons annually for many years. When I passed through the Suez Canal, going to and coming from Africa, we were held up eight hours each time, waiting for ships to pass through. The Suez Canal is eighty-six miles long.

Steaming through Gatun Lake to Pedro Miguel, a distance of thirty-two miles, ships will go through a channel three hundred to one thousand feet in width and not less than forty-five feet in depth. Throughout the first eight miles no digging is necessary, the ground being so low it is only necessary to clear away trees and underbrush to make the lake. At Bohio a few high points were being leveled off. A channel one thousand feet in width continues for fifteen miles from Gatun and ships can go at full speed. From Tabernilla the canal continues eight hundred feet wide for four miles; then to Bas Obispo, five hundred feet wide for about four miles.

Many millions of cubic yards of rock and earth were excavated by the French between Tabernilla and Bas Obispo, but the excavation has since filled up. Between these two places the Chagres River in its course crosses the canal at least fifteen times. The engineers have built division channels to take care of this. At Bas Obispo the Chagres River turns to the northeast and the canal enters the nine-mile cut through the Cordilleras (meaning mountains) where the greatest amount of excavation has been and is being done. This is the famous Culebra Cut. The French began it, and when the United States bought out the New French Company the summit near Gold Hill was one hundred and ninety-three feet above sea level, having been reduced one hundred and forty feet by them, making it necessary to cut an additional one hundred and fifty-three feet to reach the proper level.

The formation of the hills and land about is in part lava ash, and there are many landslides which seriously retard the work and, in my opinion, there will always be trouble at this point. The best known slide in the cut is the Cucaracha, just south of Gold Hill, and it has always given trouble.

There are five operations necessary in excavating. These

are drilling, blasting, loading, transporting and dumping. If all of this had to be done by hand power the Panama Canal could not be finished in a hundred years. But with the best of modern steam and electrical machinery, tripod drills, steam shovels, hundreds of miles of track in the cuts, and quick acting, self-dumping cars, the work of excavation forges rapidly ahead. Besides the above-mentioned appliances over 1,000,000 pounds of dynamite are used each month. In Culebra Cut alone there are over fifty miles of railway track, and about two hundred trains are loaded and dumped each day.

Leaving Culebra Cut, we reached the end of Gatun Lake at the Pedro Miguel locks, which will consist of a single set of locks, similar in construction to the Gatun locks. The dams connecting the locks with the near-by hills on each side are small. Next we came to Miraflores Lake, less than two square miles in area, fed by water entering with ships from the Pedro Miguel locks, and by water from the Rio Grande and Cameron Rivers, which flow into it. A spillway is located to the east to take care of the overflow.

There are two pairs of locks with lifts of twenty-seven and one-half feet at Miraflores, and from this point there is a sea-level channel eight miles in length to Balboa, the Pacific end of the canal. There is a fine harbor at Balboa, and they have today one of the finest docks in the world, owned by the United States. It is estimated that a ship can go through the canal, when finished, in twelve hours.

There are many landslides into the canal of hundreds of thousands of cubic yards of rock mixed with lava ash. The constructors and engineers argue that if this is removed each time, eventually these slides will become solid and remain so. They do not take into consideration the fact that the ground, in some places two and one-half miles from the canal, is cracked to a depth of forty feet, and slowly but surely all between is creeping toward the channel and sliding into it. I believe it will cost nearly twice \$400,000,000 before the Panama Canal is practical and safe.

I would not be candid if I did not assert my belief that the canal itself is costing twenty-five per cent more than it would had it been let to private contractors—under Government in-

spection, which would insure the quality of the work and give the United States army engineers the practical experience they need. The canal work is being run on a war basis, by the War Department, in times of peace.

I spent a good deal of time in the Panama Canal Zone, and talked with many people, some of whom worked on the canal when the French started and abandoned it, others who had been on the work ever since the United States took up the task for the benefit of the world. Through using my own eyes, ears, experience and judgment, I am fully satisfied that the canal will be finished some day, but never operated except at a big loss on the investment. Over \$1,000,000,000 will have been invested by the United States and France. The average time of this investment will be twenty years before the canal is really in constant use. The interest on \$1,000,000,000 for twenty years at 5 per cent equals another billion, and, as railroad corporations would figure, the investment would be equal to \$2,000,000,000. The annual interest on \$2,000,000,000 at 5 per cent will be \$100,000,000. Now, unless the canal earns \$100,000,000 a year, plus the cost of operation, dredging, repairs and depreciation of railroad, locks, etc., it will be operated at a loss. The Suez Canal passes twenty-one million tons a year, and we cannot expect that the Panama Canal will equal that for years to come. At one dollar per ton, all that the traffic will stand, the amount received will hardly pay operating expenses.

The canal, after all, is only a transportation company for boats. It is fifty miles long and will have cost \$40,000,000 per mile when finished. This is the way any good business man or corporation would figure it.

The theory on which the people of the United States consented to build this canal was to enable our navy to move quickly from one side of the United States to the other coast.

Navies are built to protect a country's merchant ships. On this theory, one second-class cruiser is really all the navy the United States needs, since we have almost no ships flying the American flag. The United States Congress should either make it possible to float an American flag on the water, or cease spending our money for warships, or by going into the ship transportation business in the shape of a canal under the

THE PEDRO MIGUEL TWIN LOCKS IN CONSTRUCTION.

tropical sun thousands of miles from home, when we have no merchant marine of our own. The reader will observe that I am unequivocally for a United States merchant marine as justification for our fabulous expenditure in building the canal and a big navy.

I am aware that my figures relative to the United States *billion-dollar canal* will be questioned. The added billion dollars of interest charges for the time the money shall have been invested, earning nothing, is easy to calculate. But I will prove that the United States must expend nearly \$300,000,000 more than the \$400,000,000 now estimated, which, added to the \$340,000,000 spent by the French, brings the original cost of the canal, to say nothing of interest charges, above \$1,000,000,000.

Now for the proof as to the \$300,000,000 over the estimates. My basic postulate is the character and nature of the materials from which the whole country of the Canal Zone is made—lava ash. The United States engineers never handled it before, the French gave it up.

In Venezuela there is a lake of pure asphalt, about one hundred and twenty-five acres in extent, which caused a lot of trouble. A smart Yankee bought five acres of this lake from the English company which owned it, and as fast as he took out the asphalt from his five acres, it kept filling up from the balance of the lake. Thus he could have taken out all the asphalt from one place. While this is not exactly the case with lava ash, it is almost true. Did you ever see snow slide off of a slate roof? Well, that is the way lava ash and the big stones mixed with it come sliding down into the canal.

Where do I get the \$300,000,000 above the present estimate? The first Government estimate was less than \$200,000,000. It is now \$400,000,000. There are twenty miles of cuts that average one hundred feet above the bottom level of the canal within a distance that exerts a pressure on the material through which the walls of the canal are excavated. In order to reduce the pressure so water will hold the soil back, experience has shown that it is necessary to make a grade of not over one foot to seven slope. This, applied to the one-hundred-foot average height, gives an additional excavation of seven million

cubic yards per mile on each side of the canal for twenty miles, or forty miles altogether. Forty multiplied by seven million equals two hundred and eighty million yards that the United States engineers obviously never figured on removing. Up to the present time it has cost about one dollar a cubic yard for all material removed. We are better equipped now than when we began, but most of this work will be done after the water is in the canal, and will cost not less than one dollar a cubic yard. There is \$280,000,000 of the \$300,000,000 more needed. I could easily figure up an additional expenditure of \$20,000,000 more for concrete bottoms, walls, and other obvious needs. But that would avail nothing. We must go through with the task whatever the cost. The reputation of the United States is at stake. We are big enough and strong enough and rich enough, and too proud to back out as the French corporation did when they discovered their mistake. But no corporation would, in my opinion, ever have constructed the canal, because it will never pay, and nothing but Government capital could be used without profit. Again, we must not forget that the Panama Canal is the southern boundary line of the United States.

True, we are shortening distance and thereby saving time and consequently lengthening human lives. We must take our reward and satisfaction in that. And after all, there are nobler things both for statesmanship and the individual to consider than simply saving money. The final, ultimate effect on humanity of the expenditure of money by Governments must, of course, be considered, rather than whether or not the expenditure will make returns in cash, for the civilizing and broadening of the minds of men is, in the final analysis, the true profit.

As a final observation relative to the canal itself, I have something to suggest. A query naturally arises in the mind as to what disposition, after the canal is completed, is to be made of the vast equipment of machinery being used in this work. The quantity and varied character of the excavating appliances to be finally thrown out of use is enormous. Why not employ this machinery in the reclamation of the swamp lands of the United States? In the Union, according to Government statistics, there are approximately 80,000,000 acres of overflow

SCENES IN CITY OF PANAMA.

lands not habitable or tillable through lack of drainage. The reclamation of this tremendous area of soil, it is estimated, would ultimately add \$4,000,000,000 to the land values of the United States, besides providing homes for innumerable people. It could also be used to great advantage in building levees on the banks of the Mississippi River and other rivers to protect our own people at home.

The machinery being employed in the construction of the canal belongs to the United States Government, which means that it belongs to the people of the United States. Then why could not much of the canal excavating machinery finally be floated up to the mouth of the Mississippi River, where great areas of swamp lands lie, and under a coöperative arrangement between the Federal Government and the States, be put to use in the interest of the American people who bought and owned this unrivaled supply of excavating tools? Leaving this suggestion for the reader to reflect upon, we will next turn to consideration of the Panama Republic itself.

REPUBLIC OF PANAMA

Area in square miles 35,570, or about two-thirds of the area of England—Atlantic coast line 478 miles; Pacific coast line 767 miles; width of country varies from 35 to 110 miles—Mixed population of 340,000—Capital, Panama City.

CHAPTER III.

A GLANCE AT THE BABY REPUBLIC.

FOR certain inherent reasons the Panama Republic looms large in the world's eye. Indeed, for four hundred years it has been a focal point of interest. Its history is not unlike a story from a dream book. The old city of Panama was, at one period, said to be the richest city in the world, and all over this twisted mountainous ridge of land connecting two continents, humanity, at one time and another, has fought and struggled and had strange adventures. Besides, in time prior to the earliest days of which we have history a race of beings of whom we know little or nothing dwelt here. In the province of Chiriqui, for instance, graves of this ancient people have been discovered and opened, yielding small images of solid gold, pottery, idols of stone, gold ornaments, gold bells and stone and bone implements. Who were the people whose flesh became impalpable dust in these graves, and from what quarter of the planet came they? Even the wise archeologist shakes his head and wonders.

The extreme length of the Republic of Panama is about four hundred and eighty miles, and it varies in width from thirty-five to one hundred and ten miles, its area being 35,570 square miles. This is just a little smaller than the State of Kentucky. The meandering Atlantic coast line is four hundred and seventy-eight miles long, while that of the Pacific is seven hundred and sixty-seven miles in length. It has a mixed population that is estimated at 340,000 people.

The President is elected every four years, and the Vice-President every two years. The President has but four members in his Cabinet, but it is quite probable that additional

portfolios will be created as their need is felt. There is a National Assembly, its members being elected for a term of four years, and it holds sessions every two years. An educational qualification is demanded of those who exercise the right of franchise, all voters being required to be able to write their names.

The old city of Panama, eight miles down the Pacific coast line from Panama City of today, is now in ruins. It has never recovered from the effects of the raid of Morgan, the pirate, and his men, when they sacked the city, stealing everything of value and burning most of the buildings. The only thing left is the old church tower, a relic of the city's grandeur four hundred years ago. There are legends of treasure, supposed to have been buried here by the famous buccaneer, and occasionally search is made by hopeful persons, but nothing has ever been found. It seems rather unreasonable to believe that so insatiable a gang of thieves as were Morgan and his men would leave anything valuable behind.

The political history of the Isthmus of Panama is marked with the scars of many a battle and revolution. The most bloody conflict of late years was the Civil War of 1900-1902. Panama was then a State of Colombia, and this war was between the Liberal and Conservative parties. Over fifty thousand people were killed in two years of fighting. Back

there was a revolution in of Colon, which was headed by a lawyer named Preston, and a band of roughs as followers. They burned the city and a reign of terror for three weeks, the end coming only when the leader was captured and hanged.

When the Republic of Colombia refused to grant the United States the rights and franchises necessary to insure its position in constructing

the canal—the same as had been granted to the French corporation—the province of Panama on November, 2, 1903, declared its independence, and all nations, with the exception of Colombia, soon afterward recognized its independence.

There was no serious fighting or rioting following the secession of Panama. It is true, however, that a Colombian gunboat in the harbor before Panama City fired eight or nine shots into the city, killing one poor Chinaman who was peacefully lying on his bed-mat smoking opium. Besides the dreaming Chinaman, singularly enough, the champion game-cock of the Isthmus, it is declared, was blown to atoms. Nevertheless, it was one of the most peaceful secessions recorded in history.

Panama benefited financially by its secession from Colombia, as might be expected. It received \$10,000,000 outright from the United States, and nine years after the signing of the treaty, in which the Republic of Panama granted us the land and rights to construct a canal, we are to begin paying them an annuity of \$250,000. Of the \$10,000,000 received from the United States by Panama, \$6,000,000 is deposited in New York banks to afford the posterity of Panama profit from the sale of the Canal Zone. Thus Uncle Sam "eats his cake and keeps it" (in New York). May he never have indigestion! Three hundred thousand dollars, of this above-mentioned \$10,000,000, is deposited in New York banks to guarantee the parity of gold and silver in Panama, keeping normal the ratio of 2 to 1. An American gold dollar is held as being worth two silver Panamanian dollars. All the metal money of Panama is coined in the United States mint, under a provision in the treaty between the two countries. The remaining \$3,700,000 of the \$10,000,000 has been spent by the Panama Government in building schools, a theater, a palace for the President, roads, and in other improvements for the benefit of the country and its people.

Harking back to a bit of historic diplomacy it seems relevant to remark here that three officers of the United States army could, if they would, tell an interesting story of a breakfast which took place at a country house on the plains outside of Panama City, at which were present, besides the three Americans, twenty-five of the leading citizens of Panama. It

was immediately after this breakfast that the Republic of Panama announced its secession from Colombia. It is quite evident that the United States Secret Service accomplishes things for its country, but it is seldom that its achievements are brought to public notice. It was the report of this meeting by the New York *World*, and other newspapers, that caused the suit by the United States against those papers. The suit was decided in all courts against the Government.

There are two political parties in the Republic of Panama, the Liberals and Conservatives. The Liberals do not believe in enforcing the marriage laws of the Catholic Church, nor are they hand-in-glove with the Church, as are the Conservatives. The Liberal party was in power at the time of my visit, with Mr. Arosemena as President. He receives a salary of \$9,000 a year. The Panamanian Government is without an army or navy, and has not a cent in the treasury, yet it maintains large, costly diplomatic and consular service to represent it all over the world. This seems uncalled for, considering the size of the country and the smallness of its population, 340,000.

The Republic of Panama has done everything within reason to induce Colombia to recognize its independence, even agreeing to pay its share, \$1,500,000, of Colombia's national debt of \$10,000,000, which was contracted when Panama was a State of Colombia. Thus far Colombia has refused to recognize Panama as an independent nation, and will not receive any diplomatic emissaries that Panama has sent to it.

The matter remains unsettled, and thus far without resort to arms. The Panama Republic, having the United States at its back, possibly feels somewhat like a certain litigant I heard of in Chicago. A lawyer there, for some years a police magistrate, was a natural peacemaker and always endeavored to smooth over any slight differences between the persons brought before him. Once, when the charge involved was for technical assault, it came out in the course of evidence that the parties were neighbors, and had formerly been on the best of terms.

"This is too bad, too bad!" commented the judge. "And between such old friends! Is this not a case that might be settled out of court?"

"I'm sorry to say that it can't be done, your honor," re-

THE CITY OF PANAMA, FROM ANCON HILL, SHOWING CONCRETE RESERVOIR IN FOREGROUND AND ADMINISTRATION
BUILDING ON THE LEFT.

marked the plaintiff, seriously. "I thought of that myself, but the coward won't fight."

In the old days Panama City was one of the most disorderly cities in the world, robberies, murders and hold-ups being everyday affairs. But today it is a quiet, orderly community. Panama has a thousand policemen, and three hundred cabmen. If one has trouble with a policeman the officer does not stop to argue. He simply blows his whistle, and like magic, the offender is surrounded by ten more policemen and hustled off to jail in a real American-made Black Maria. The cabs are all old carryalls, importations from the States, and drawn by little runts of horses or mules, and the drivers are, in most part, Jamaican negroes. One may drive from any point in the city to another for ten cents gold. Ten cents gold means ten cents in United States money, or twenty cents Panama silver. They have no gold coin or paper money in Panama.

I was invited to a reception on the Japanese battleship, *Asama*, by the Admiral, and left the dock on a launch with the President of Panama, Mr Arosemena. He is a very intelli-

gent and cultured gentleman, and we conversed at length on general topics, though naturally most of the talk related to his country, and I gained valuable information from him. There were American and Panamanian ladies aboard the ship, and everybody danced and enjoyed the hospitality of the Admiral. The guns of the *Asama* saluted the President when he left, and he invited me to go ashore with him in his private launch. When we landed at the dock I accepted his invitation and went to the Union Club to have refreshments with him and his staff. I proposed a toast to the President of the Republic of Panama, and he in turn proposed the health of the President of the United States.

If the United States will make the Panama Canal Zone *free*, meaning free of import and export duties, it will become a distributing center for the goods of every country in the world when the canal is completed. With the opening of the canal ships will go through from every nation, and Panama City will become another Port Said, which is today the wickedest city in the world, as well as one of the best from a commercial standpoint. Boats will bring adventurers of both sexes, who will come to ply their trades, having many customers in the thousands of people who will stop in the city, and Panama City will grow as Port Said has since the completion of the Suez Canal.

Whenever there is a parade in Panama the firemen are the prettiest sight of all, as their uniforms are quite striking, being made of red, blue and gold. The chief and officers of the fire department were attending a ball at the President's palace just previous to our advent in the country, when the fire alarm rang; a big fire was raging in a house near the railway station. I was told that the chief and officers went to their homes and put on their brilliant uniforms before going to lead their brave men in fighting the blaze, and when they finally arrived on the scene the house was burned to the ground.

One night a joking American called up the chief of police in Panama City on the telephone and told him there would be a big earthquake that night, and the chief instructed his men to warn all the people to get out of their houses. The Panamanians rushed out of doors when they heard the warning, carrying their most valuable possessions. The Americans who were in

MEMBERS OF THE PANAMA CITY FIRE DEPARTMENT.

on the joke mixed together a large quantity of differently-colored Chinese powders, which when set on fire made a colored light never before seen, and the frightened Panamanians thought for a while that the end of the world had surely come.

A friend of mine, who attended the last bull-fight on the Isthmus, related to me what happened. The managers of the bull ring decided to produce something unique in the way of a spectacle, something that would thrill the heart and cause the hair to rise. To this end they brought a cage containing a tiger into the ring, opened the cage and awaited the thrilling conflict that they expected would follow. However, the tiger only glanced at the angry bull and then bounded up the barriers, attempting to climb out of the amphitheater among the excited audience. Many of the Panamanians drew pistols and began shooting at the tiger. One of the bullets unfortunately hit the bull, and he, too, made for the audience. A state of panic ensued, but luckily the police entered and killed both bull and tiger. When the excitement had subsided it was found that one poor

OUTDOOR LAUNDRY WORK NEAR THE CITY OF PANAMA.

peon had been shot in the ear, that being the extent of the casualties.

We wanted to see something of the interior of Panama, and in arranging for the trip met a "man from home." He was Missourian-born, Californian-raised, and for eight years had been in the Canal Zone, formerly working for the Government, but was now in the towing business for himself. He had a commodious gasoline tug, and I employed him to take us on a brief voyage of discovery. He charged us fifty dollars gold a day. Others paid him but twenty-five dollars per day for the use of his boat. Being from the United States we had to pay double.

We sailed one morning at five o'clock, from the harbor of Panama, twenty-five miles across the bay to the mouth of the Bayano River, the most navigable river, and succeeded in crossing the bar at the mouth of the stream at high tide, about nine a. m. We spent the day on the river.

On our return trip the tide was going out and we ran onto a big rock that nearly wrecked us. We were stuck fast very hard and the boat lay on its side at an angle of forty-five degrees. The tipping of the boat landed everything prepared for our dinner in the water, including the table and chairs that were on the deck, but by moving the big tanks of gasoline to the "high side" of the deck, we were saved from turning completely over. The crew consisted of the owner, who ran the engine, a half-breed pilot and the cook, who was a boy apparently not above ten or twelve years of age.

The fright exhibited by the crew when we went aground was very amusing, the owner, pilot and the boy talking Spanish-Indian, gesticulating wildly, and so excited that they forgot to stop the engine. I did not understand their tempestuous talk, but it was just as well; without much doubt it would have proved unprintable. There was nothing to do but wait for the next tide. The photographer and Charlie, my colored boy, remained

NATIVE CHILDREN OF
PANAMA.

on deck, while my secretary and I went into the cabin to get away from the mosquitoes and insects. But we did not better matters at all. About midnight the incoming tide floated the tug, and owing to the ballast we had moved to the "high side," the boat suddenly turned over on her other side, and everybody and everything on the deck went into the river. My secretary and I rushed out from the little cabin and aided the poor photographer, Charlie and the drenched crew, in their spluttering efforts to get out of the water. We reached Panama at daylight, feeling that we had had experience enough for twenty-four hours.

While sailing along the Bayano River we passed several plantations, owned by American companies, which were from sixty to one hundred thousand acres in extent. At San Antonio, the Illinois Lumber Company, of Peoria, Ill., has a tract of eight thousand acres. I saw machinery there for a sawmill, which, on account of the lack of labor, had not been set up. Farther up the river the United Fruit Company has a large tract.

and just beyond this concession is one owned by some California people.

A new land law of the Panama Government permits the purchase of only three hundred acres at a time, and it is my opinion that all of the interior lands will remain undeveloped until the Panama Canal is finished, when the thirty thousand laborers, accustomed to working in the tropics, will be looking for homes and employment. Those who have saved money will take up land and grow bananas, rice, sugar-cane, etc., and those who have not saved will be glad to go to work on the big plantations.

There are great forests of mango trees, which make fine railroad ties and piles. I was greatly surprised that the United States Government had not utilized the timber of the Isthmus in the wood construction on the canal and railway. All the piles, ties, and timber of different sorts have been shipped from the States, further depleting our scanty forests and swelling the receipts of the Government line of boats for transporta-

tion charges. Right along the line of the railroad is timber enough to make ties for ten lines like the Panama Railway, yet all ties are shipped to the Zone from New York. It is difficult to understand, save on the hypothesis that somewhere in the operation the self-interest of some person or persons is being served.

At the head of navigation of the Bayano River we were well into the San Blas Indian country. These natives are surly, warlike people, who once a month paddle their *balsas* (canoes or dugouts), filled with rubber and fruits, to Panama City to trade or sell. They also bring in the only gold mined or found in the republic, but they will not tell where they get it, and prospectors in their country, it is said, are shot at with poisoned arrows, which is discouraging even to hunters of the magic stuff we call gold.

The principal sports of the Panamanians, since bull-fighting has been stopped by law, is cock-fighting. Seemingly every male native, from ten years old up, has his prize game-cock, and he will wager every cent he has, and sometimes the few clothes he wears on his back, that his bird can lick any other bird in the country. Sunday and *fiesta* days are the cock-fighting days, and as in all Spanish-speaking countries there are about ten feast days a month, you see that the Panamanians have plenty of time to enjoy their national pastime.

The lottery in Panama is a great source of revenue to its owners and the Government. The original concession was granted by the Republic of Colombia to run fifty years. The men who hold the charter, and it is said the Church owns most of the stock, have ten years of the concession still to run. When Panama became a republic it granted another concession to some Chinamen, but this was taken away from the concessionaries when they failed to pay one of the capital prizes.

That the eyes of the world are on Panama and the big canal is evidenced by the clever men the various nations have sent to represent their Governments in the Republic of Panama. Thomas C. Dawson, of Iowa, American minister to Panama in 1910, now deceased, was a well-informed man on Latin-American affairs, and whenever there was a disturbance in any of those countries our Government sent him to represent

it. Mr. Mallett, the English consul-general, is an able man, having had wide experience in Latin-American countries. Mr. Frederic Pezet, who represented Peru, is one of the most influential men of that nation. He has written several standard books on his country, and is well informed on all questions of importance. I had the pleasure of dining at his home in Panama City, and of meeting his wife, a cultured Peruvian lady. There were at this dinner the British minister and his wife, Lieutenant-Colonel and Mrs. Goethals, and several distinguished Panamanians. I am glad to state that Mr. Pezet has since been appointed to Washington as minister to the United States from Peru.

In here taking leave of the Panama Republic and the Canal Zone, I think I may truthfully assert that at present they constitute quite as interesting a region as may be found anywhere on earth. As for the future of this small arena of activity, one needs no more than a moderate gift of imagination to forecast that the eyes of the world will find it a center of interest for many years to come, and perhaps for all time.

It is frequently said that some day the United States will take over the whole republic, but I feel about it like the old Tennessee mountaineer. He had never seen a railroad or train, and, while camping one evening beside a new railroad track, the night express went whizzing by. The roar of the engine, tooting of the whistle, clanging of the bell, and gleam of the headlight were all new to him, as they were to his faithful dog, which chased yelping down the track after the flying train. The old man called excitedly after the dog: "Come back, Shep, come back! Don't try to catch it! I don't know what the thing is—neither do you, and I don't know what you would do with it, if you did catch it!" The question is, would we really know what to do with the Panama Republic if we did take it?

ECUADOR

Area in square miles, 120,000, about three times the size of the State of Pennsylvania—Total exports (1910), \$13,666,371; imports, \$8,024,105; exports to the United States (1911), \$3,628,805; imports from the United States, \$2,238,536—Chief resources, coffee, rubber, ivory, nuts, cacao (chocolate), cabinet woods, Panama hats, Peruvian bark—Large mineral deposits, but little developed—Population, estimated, 1,300,000, nearly two-thirds Indian—Army, peace footing, 4,500, war footing, 95,000—Navy, 2 ships, 130 officers and men—Capital, Quito, population, 80,000.

CHAPTER IV.

A LAND OF CONTRADICTIONS.

SOME one has said that it is the uncertainty of women that causes men to go "dippy" about them. It is a similar quality, perhaps, that makes traveling to distant and unvisited scenes so fascinating. Whether or not one is going to arrive, and the changes and unexpected daily newness of things on the way, are as uncertain as a woman's moods. The illustration is peculiarly apt when applied to traveling down the western side of South America, with its visions of glittering ocean, green islands, forest-covered headlands, wastes of sand and starry nights, as well as hours of fog and puzzling days that try one's soul.

Much to my surprise I found the west coast of tropical South America, for the most part, pleasantly cool. Every night after leaving Panama we slept under sheets and blankets. I have crossed the equator twenty times along the coasts of other countries and always suffered from the heat. There is a "reason why" for everything, and the explanation of this coolness on the Pacific coast of South America is the Humboldt cold ocean current which, coming from the Antarctic Ocean, runs north at the rate of three miles an hour along the west coast of this grand division, cooling the tropical heat to a degree that is quite comfortable.

BRINGING A BODY FROM THE GENERAL HOSPITAL, GUAYAQUIL, ECUADOR. (NOTE THE TRAMWAY FUNERAL CAR.)

It is evident from the construction of the ocean coast steamers of the Pacific that they do not expect to encounter big storms or very severe weather, as all the deck staterooms open out, like those of river steamers. There is not a harbor in the entire 4,000-mile stretch of Pacific coast from Panama to the Straits of Magellan, where ocean steamers go up to the dock to receive and discharge passengers and freight. Buenos Aires and Bahia Blanca in Argentina, and Santos in Brazil are the only ports in South America where boats drawing twenty-three feet of water are berthed alongside the wharf. The greatest expense in shipping by water along the coast is the loading and unloading of cargoes, for at all ports the big steamers lie out in deep water, and passengers and freight are taken ashore by small boats. Owing to frequent foggy weather, making the port is a very uncertain matter, and as the officials at a port will not work after dark, one may lose an entire day on account of an hour's delay.

When there is no mist or fog the air is clear and light, however, but there were many days during my voyage when it was so dense that no photographing could be done. Owing to the absence of cold storage accommodations, the Pacific coast steamers, as far south as Lima, Peru, carry live stock on the hoof and fowls in cages all the time, and when one awakens in the morning the familiar mooing of cattle, bleating of sheep, crowing of roosters and cackle of hens, is likely at first to make one think he is near a barnyard. One morning, for lack of something more exciting to do, I strolled into the "nether regions" of the vessel and watched them butcher the animals that were to furnish the meat for our dinner, and while there learned that in counting the cattle on hand that morning it was found that there was one more than the day before—a calf having joined the herd during the night. At breakfast my waiter served me with freshly laid eggs, so you see that with tropical fruits and fresh fish added, a passenger on these boats fares very well. But the primitive style of carrying provisions, as compared with methods employed on the Atlantic liners, is little less than startling.

The first port we stopped at after leaving Panama was Buenaventura, Colombia, and a truly tropical scene met my

eye, as I stood at the ship's rail and gazed off toward the city of low, red, iron-roofed buildings that seemed to be set in a jungle of cane and bamboo, relieved by mango trees. The anchor had hardly touched bottom before we were surrounded by a fleet of small boats owned by yellow or bronze skinned men and women, each one intent on making the stopping of our steamer as remunerative to himself as possible.

Four hundred miles south of Buenaventura, and very near the equator, we came to Guayaquil, the port of Ecuador.

Ecuador is a land of contradictions. The traveler arrives at Guayaquil laden with quinine tablets; he learns that he can journey in a day from fever-stricken lowlands to temperate plateaux. He brings summer clothing for a country crossed by the equator, and nearly perishes from cold on the frozen slopes of gigantic peaks. He finds a Government as unstable as the volcano-shaken soil; yet notes that, in spite of quakes and revolutions, three important industries thrive on these turbulent shores.

The history of this interesting and little known country trails back into the shadowy past. On the Manabi coast hills, where the Panama hat weavers toil today, archeologists have discovered the sculptured stone seats of a prehistoric people. The Caras of Quito came later and are within the reach of oral tradition.

Ecuador has its Cleopatra. When Huayna-Capac, aggressive ruler of the Incas, marched northward to subjugate the Caras in the fifteenth century, his queen and heir remained behind in Cuzco. In Quito, the Peruvian conqueror fell a victim to the wiles of a

Cara princess, and to Atahualpa, the son whom she bore him, he willed half his kingdom.

We all know the tragic story of the fall of the Incas—of Atahualpa's fate. The proudest race of the Americans was enslaved and Ecuador became a colony of Spain. Since then Quito, the capital, has been the stage of many a dramatic scene from those picturesque days when Gonzalo Pizarro rode out of its gates with the first expedition to cross the Andes, on down to the bloody atrocities of recent revolutions.

The land which bears the name of the equator rivals her sister republics in variety of scenery and of climate. Her feet rest on the dazzling chrome-green shores of a tropic river; her head wears the fleecy crown of eterna snows. With one hand she points to the wide Pacific; with the other to the matted jungle of the Amazonian Valley. Colombia, Brazil,

and Peru are her neighbors, but who can say where the territory of the one actually begins and the other ends?

Ecuador is almost three times the size of the State of Pennsylvania, but she has only as many inhabitants as Philadelphia. Nine-tenths of her population live in highland valleys—a mile to a mile and a half above the sea—between the two great parallel ranges of the Andes. The greater portion of her domain lies in a practically unexplored forest country, inhabited by savage and semi-civilized Indian tribes. The most of the early expeditions to the headwaters of the Amazon were made from the city of Quito, yet the republican descendants of the Ecuadorian Spaniards have shown neither the energy to cultivate, nor the nerve to hold, the conquests of their sturdy ancestors.

Commercially, Ecuador is slowly struggling forward. In 1911 the total trade amounted to \$21,000,000, or \$14 per

capita. Of this the United States' share was thirty-five per cent. Seven-eighths of this commerce passed through the port of Guayaquil.

Guayaquil, the front door of the republic, is notoriously unhealthy. This well-earned reputation is brought up to date by news of the death by yellow fever of Commander Bertollette, of the United States gunboat *Yorktown*, while guarding American interests during the recent revolution. In the long list of victims from this scourge are names of many other Americans, among them that of Thomas Nast, the famous cartoonist, who served as United States consul at Guayaquil.

This chief port and metropolis of the country owes its commercial importance to its situation on a bank of the broad Guayas, the largest river on the Pacific side of the continent. It lies near the head of the Gulf of Guayaquil, and its harbor is so deep that large ocean-going vessels can steam close to its shores, but not its docks.

The unfortunate people who exist in the miasmatic air of this fever trap have only one reason for remaining—an opportunity for money making.

The city stretches for two miles along the west bank of the Guayas, presenting an attractive appearance, when viewed from the ship's deck, but when personally inspected the illusion is dispelled. During the rainy season—December to June—the fierce sun of the equator glares down between showers, coating the stagnant water on every street with a sickly green scum. The pretentious vari-colored buildings, which line the main streets, prove of flimsy construction, resembling those erected in our cities for the housing of street fairs. This style of temporary construction is indeed but fleeting, for the town has been burned again and again—with an almost complete destruction some dozen years ago, when a loss of \$20,000,000 was estimated. The city is still poorly protected against fire and the prevailing insurance rate is as high as seven per cent.

Guayaquil could easily be made healthful. It lies between two waterways, and a series of ditches would permit the high tide water from the Pacific to flush it twice daily. Most elaborate plans were drawn and lithographed, some five years ago,

SCENE AT THE GOVERNMENT WHARF, HARBOR OF GUAYAQUIL, ECUADOR.

for the sanitation of the port, but have not yet been carried into effect.

Since bubonic plague has often broken out in Guayaquil, and smallpox and yellow fever are nearly always prevalent there, the Panama Commission were alarmed lest one or all of these diseases might be transmitted to the canal district. Wishing to prevent such a disaster, the commission dispatched a trusted physician to Guayaquil with the hope of bringing about a more sanitary condition in that city. What followed illustrates why Guayaquil remains a menace to the cities of the Pacific coast of South America.

The physician sent by the Canal Commission was received and listened to attentively by the Guayaquil city council, and they grew so enthusiastic about sanitation that they offered him \$500 per month to remain with them and superintend the work of rendering the city safe from plague. The president of the Guayaquil council was also Vice-President of Ecuador. The physician from the commission at once began organizing the sanitary work, killing rats, and examining them for bubonic plague, etc. Presently he discovered a rat that was infected by the plague. He reported it to the president of the city council, stating that his discoveries indicated that bubonic plague was about to break out. To his astonishment the official charged him with having introduced the plague, so that the physician might continue drawing his salary. The official challenged the doctor to a duel in his rage. The doctor being the challenged party had the right of choice of weapons. Having only contempt for the childish stupidity of the official, he named a very unusual weapon, nothing less than that himself and the official should be inoculated with a new serum for bubonic plague, it not yet being surely known if the serum would kill the one who took it, or whether or not it would render the person immune to the plague, stating, "If we must die, let us die in the interest of science." The daring proposal frightened the official and he withdrew the challenge. Later the physician, being unable to effect any benefits to a town whose officials were so ignorant and suspicious, returned to Panama.

The Guayaquil and Quito Railway, connecting the port

with the national capital, was completed about two years ago, crowning the labors of over thirty-one years. This road represents an outlay of large sums of money. The first section of the line was comparatively easy of construction, but the second section, from the Valley of Chauchan to Quito, was attended by great engineering difficulties. In 1897, the late President Alfaro approved the contract with an American syndicate, represented by Mr. Arthur Harman, who undertook to construct a permanent right of way to Quito, to put the then existing road in good condition, and to make more convenient connections between Guayaquil and Duran, the town across the Guayas River, which is the railway terminus. Six years was fixed as the limit of time required for the work, but unforeseen difficulties arose, and eleven years elapsed before the line was completed.

The operation of this railway is expensive, owing to the necessity of importing coal from Australia. Coal fields exist within forty miles of the main line, and when these beds are explored and connected with the railway by a branch line, the road should pay handsomely.

Other railroads of lesser importance have been built or are in course of building in Ecuador, but the Guayaquil and Quito Railway is, and will long continue to be, the main highway of travel. The journey of 227 miles up to the capital is made in two days, a vast improvement over the old mule and foot trail on which the weary traveler in former days was obliged to spend two weeks.

Crossing the stately Guayas River to the little town of Duran, the railway terminus, it's "All aboard for Quito!—Quito, the City of Eternal Spring!"

For seventy miles we traversed the lowlands, alternating between swamp and jungle, plantation and pasture land. Herds of cattle browsed shoulder-deep in tall grass. In the swampy villages we saw numerous huts resting on piles, only the upper story being inhabited. The room below serves as a shelter for dogs, hogs, and *arrieros* (muleteers).

Then we began to climb, winding, snake-fashion, through narrow ravines, across deep gorges up to Huigra, 4,000 feet above the sea. From there we simply crept up precipitous

MARKET ON THE WHARF, GUAYAQUIL, ECUADOR.

STREET IN QUITO, ECUADOR, ON WHICH ARE SITUATED THE
PRINCIPAL HOTELS AND NEWSPAPERS.

mountain walls to "The Devil's Nose," where we backed onto a siding to catch our breath and reverse the engine.

Up, up, toils, tugs, puffs our sturdy engine. We skirt Titanic chasms; the mountain borders loom to the sky. At last we reach the table-land and are 12,000 feet above the sea!

Chimborazo, Emperor of the Equator, and Cotopaxi, King of the Volcanoes, rule here. The greater giant of these peaks towers 10,000 feet above the plain, 22,498 feet above the ocean's level!

Our way then turned across a vast lava tract, then through a mountain pass, and we came to a verdant plain, 200 miles long by thirty miles wide, a wonderful plain, overshadowed by twenty gigantic volcanoes, watch towers of the gods. Here lies Quito, the ancient and modern capital, the pulse, the heart of Ecuador.

The name Quito, or Quitu, is of a race of people who inhabited this plateau before the reign of the Caras. Tradition has it that the Caras came on rafts from Peru, settled on the coast and ascended the mountains to conquer the Quitus. History repeats itself; Incas gave way to Europeans; Spaniards to Republicans. Revolution followed revolution, yet in spite

of many changes of rule, of political intrigue and strife, in spite even of Nature's kaleidoscopic hand in the shifting topography of the country, Quito has preserved her old landmarks and customs. Ecuadorians, of the educated class of Spanish blood, are in the march of progress; but the peasantry, the great mass of the people, are of a race of ages long past. Seventy per cent of the 80,000 inhabitants of the capital are of pure Indian blood. The Quitus still live in Quito.

The city, of course, has its modern side, its men of culture, its pretty dark-eyed women who wear European gowns and ride in well-appointed carriages. It has electricity, telephones, and rather expensive hotels for a West Coast Latin-American city. It has Government buildings, churches, a cathedral, an opera house and park promenade. None of these is half so

interesting to the North American as the old architecture and the picturesque natives. We have progress at home, but we sadly lack picturesqueness and local coloring. These are the great charm of South America.

The bamboo carrier bearing a load twice his own height, plodding over the cobblestones with the aid of two huge poles; the gaudy dancers and betinseled masqueraders who follow festival processions; the huge hunchbacks, who prove on inspection to be normal men with enormous water jars strapped to their backs—such types delight the foreigner.

And on the narrow city streets, overhung with little Old-World balconies, a strange, scantily clothed creature is now and then seen among the town Indians and *mestizos*. He is of the Napo River tribe, from far across the Andes.

The vast forest country beyond the Royal Range is called La Region Oriental—"The East." It is a wilderness, its only roads the flowing rivers rushing down to the Amazon. Here Orellana passed on his way to discover the "King of Rivers" in the fifteenth century. We really know little more now of its people than he and his companions observed.

The Napo River folk, who occasionally venture up to the highlands and civilization, are Christianized Indians. They speak Quichua, the universal language of the Andean highlanders, and they eat salt. These are the two great characteristics which place them in the class of *Indios*, or "tame savages." The

INDIAN, WIFE AND CHILD,
MANABI, ECUADOR.

GROUP OF ANISHIRI INDIANS, ON THE ARABELA RIVER, NAPO,
ECUADOR.

wild tribes, the *Infeles*, or infidels, cannot speak Quichua and eat no salt. The highlanders fear and scorn them.

Of the wild hordes, the Zapparos, occupying the territory between the Napo and Pastaza Rivers; the Jivaros, Piojes, Iquitos Mazanes and others—few travelers can speak authori-

tatively. Even to the average Ecuadorian, "La Region Oriental" is almost unknown.

Another little known and most interesting territory belonging to Ecuador is embraced in the Galapagos group of islands, about one hundred and forty miles westward in the Pacific. The total area of these lava rocks is 3,170 square miles, with a population of less than five hundred. When discovered, in 1535, these islands were uninhabited, but were soon the resort of buccaneers, whalers and a few white settlers from the mainland. The cotton, tobacco, and other plants introduced by these colonists now run wild, as do also cattle, horses, dogs, goats and other imported animals.

Of deep interest to zoölogists is the native fauna of these islands. A gigantic tortoise, two strange kinds of lizards, snakes and land birds of a distinct species, were discovered here by the famous naturalist, Darwin. This isolated development was one of the striking facts which ultimately led to the great scientist's conclusions regarding the origin of species, and from that on to the modern theory of evolution.

But not the scientists only have an eye on the Galapagos Isles. Uncle Sam covets them. Here lies one of the logical points in the Pacific for the defense of the Panama Canal.

The opening of the canal across the Isthmus of Panama

sounds the bugle call of West Coast development in South America. Ecuador will then have an opportunity to "join the procession." Her great resources are yet to be developed. She needs white settlers, particularly in the "Oriental" region, and more railroads. Above all, she needs peace. Her vast domain—from Andean peak to jungle, from rich pasture land to lava rock—is in need of a stable government. And we might also pray for a prevention against volcanoes.

Ecuador leads the world as a cacao producer. Her crop last year amounted to two hundred billion beans, an amount, it is estimated, sufficient to furnish every person in the United States with thirty-six cups of chocolate. America heads the list as a cacao consumer. Coffee and tea were brought to our shores from the Old World, but cacao

CACAO, OR CHOCOLATE BEANS, IN
PODS ON TREES, ECUADOR.

is indigenous, a native product of all tropical America. The Aztecs of Mexico made a drink from it in prehistoric times, and their name, *chocolatl*, was corrupted by the Spaniards into cacao. We have changed only one letter of the old Aztec word, but it is as cacao, rather than as chocolate, that the product is known throughout much of the world.

The cacao beans of commerce resemble lima beans in size,

and are embedded in the pulp of the melon-like fruit, which grows on good-sized trees. The oval-shaped fruit varies in color from yellow and brown to red and purple. A tree may bear fruit, flower and blossom at the same time. Cacao can be profitably grown on only a comparatively small area of the world's surface, twenty degrees north and south of the equator. A large part of the cacao of commerce is the product of cultivated trees.

In Ecuador I observed that the young trees were shaded by banana plants and, whenever possible, were grown on the hillsides, as drainage is an important feature. A cacao tree produces usually in three years, and in five years yields from one to two pounds of beans. As it grows older and larger its yield is, of course, greater.

The gatherer severs the fruit from the tree by means of a pruning-shaped knife attached to a long pole, and allows the pods to remain on the ground for a day or two. The pulp is then removed from the beans. On the up-to-date plantations of Ecuador modern machinery is used for this part of the work, but simple primitive methods are more often in vogue. The beans are sun-dried on stone *patios* and turned often that they may dry evenly. Lacking a *patio*, the native spreads his beans out on the ground in front of his hut, and even makes use of the village street.

Until the present time Ecuador has been fairly free from the scourge which has attacked the cacao groves of several other countries of the world. Its trees seem of a hardier variety.

The traveler who walks along Guayaquil's crowded water-front learns at first hand the importance of this in-

TAGUA NUTS, OR VEGETABLE IVORY, IN
THE UNPICKED PODS, ECUADOR.

SCENE ON A TAGUA PLANTATION, ECUADOR. PLACING THE IVORY
NUTS IN SACKS.

dust, which amounted to \$8,000,000 in 1911, four-sevenths of the total value of the exports. Every other building seems to be a warehouse, piled high with cacao bags. Great numbers of lighters, laden with this product, ply between the shore and ships in the great harbor, the departure of the seeds of the cacao trees of the Land of the Equator to fill cups with chocolate in the far countries of the world.

I thought that I still reflected the brilliant green absorbed from the verdant shores of the Guayas, when I first landed in Guayaquil; for one of the first remarks made by the American consul seemed to stamp this condition as evident.

"How is business?" I asked.

"Well," he replied, "only fair. The cacao harvest is average, but the button crop is practically a failure!"

"The button crop!" I thought I was being "joshed." Surely my letter of introduction deserved better treatment from the consul. Though I might reflect the green of the

tropics, I was hardly "tenderfoot" enough for a joke like that.

"Button crop a failure? Well, that's bad." I now had regained my breath. "Strange, these calamities! Up the coast at Panama the heavy rains ruined the macaroni crop!" I said.

The consul looked up oddly, then broke into a laugh. "Oh, I see!" he said. "You don't understand. Buttons, you know—they're our vegetable ivory; *tagua*; nuts from a palm tree; from the 'inside country.' We few English-speaking people call 'em 'buttons' because they become, eventually, the buttons of commerce."

Well, this was a surprise! In my youthful days I had heard much of "Button, button, who's got the button?" but I never dreamed it was a palm tree. Still the consul was right.

The clothes of the world today are buttoned with ivory nuts, and Ecuador is the leading producer. Her *tagua* crop in 1911 was valued at \$1,700,000, ranking next to her cacao.

The palm which produces the ivory nuts is found on the Pacific coast of Ecuador and Colombia, in Panama and in Central America. It grows from ten to twenty

HORSES LOADED WITH TAGUA NUTS (VEGETABLE IVORY) ON A PLANTATION,
ESMERALDAS, ECUADOR.

feet in height, and at the base of the leaves bears a cluster of nuts resembling cocoanuts. Each nut contains seeds about the size of small potatoes, fine-grained and approximating real ivory in all characteristics.

The ease with which this vegetable ivory can be shaped by machinery, and its quality of absorbing and retaining dyes of any color, make it ideal material for the manufacture of buttons. It is also made into umbrella handles, chessmen, and poker chips.

Tagua is shipped to the United States, Germany, France, Italy, and England. The *taguaros* who gather the nuts are, as a rule, very poor, and it is necessary for the Guayaquil and Esmeraldas merchants to advance supplies and outfits to the gatherers to be paid for when the crop comes in. The gatherers work in parties of two, "poling" their canoes up stream for several days to the *tagua* forests on the public lands. Arriving as near as possible to the forest, a camp is made on the river shore, a rough cabin built and thatched with palm. The preparation for work begins with the weaving of baskets, each to contain two hundred pounds of nuts. Sometimes mules are available, but usually the filled baskets are borne to the rivers on the backs of the men.

For bringing the produce down stream a raft of cork-like *balsa* wood is constructed. Often ten tons of nuts are thus brought down to market on a single raft. Sometimes the cargo does not pay the expense of gathering, for bad weather and poor prices may leave the *taguaros* still in debt. However, in the long run they make a little money. They do not expect much.

Some time ago, when war with Peru seemed imminent, the Government of Ecuador doubled the export tax on *tagua* and drafted the *taguaros* into the army, causing a partial paralysis of the industry. The world for a time was short on buttons, but luckily mankind had safety pins!

The most of the so-called "Panama hats" of commerce are woven in southern Ecuador. Guayaquil is the great emporium and distributing center of the Panama hat industry of the world. This is the sole manufactured product exported from the republic. Think of that!

MONASTERY OF SAN FRANCISCO AND MARKET, QUITO, ECUADOR.

In Latin America, these hats are not known as "Panamas," but as "Jipijapas," in honor of the Ecuadorian village of Jipijapa, where the first of the hats are said to have been woven.

The high price of the "Panama" in foreign countries is due to import duties. On his native heath the peasant wears a hat which any American millionaire might envy.

The material used is not a grass or reed, as is sometimes stated, but *toquilla* straw, the fiber of a palm (*carludovica palmata*) native of Ecuador, Peru, and Colombia. The shrub is fan-shaped and attains a height of some five feet. It is cut just before it ripens, immersed in boiling water and sun-dried. The leaf is then split in shreds for weaving, and must be kept damp during the process. "All Panama hats are woven under water and by moonlight," a Chicago woman once announced to me, and she believed it. True, the straw must be kept damp, and weavers often work in the early morning and the cool of the evening, but the submerged moonlight story is more picturesque than authentic.

Greater whiteness of straw may be obtained by boiling the palm in water containing lemon juice. In the finer grades a fiber as delicate as linen thread is used, and the weavers are quite as skilful as the world's rarest lace-makers. Children, both boys and girls, learn the art from their parents, and skill evolves with each generation. The finest Panama hat ever made was sent to the late King of England. It was so exquisitely woven that it could be folded into a package little larger than a watch. In Ecuador, *cavalleros* carry folded hats in their pockets without the slightest injury, so soft and silky, yet durable, is the straw.

The province of Manabi, bordering the Atlantic, is the greatest producer of *toquilla* straw, and here are the towns of Montecristi, Santa Ana and Jipijapa, the heart of the Panama industry. One and a quarter million dollars' worth of hats were sent out of Ecuador in 1911, and fifty thousand dollars' worth of straw was exported to neighboring countries. Much of this went to Peru.

In Peru the *toquilla* grows on the eastern slope of the Andes and the weavers live on the desert coast. They import the straw from Ecuador, rather than bring it from far over the

mountains. Catacaos, in northern Peru, is the best known Peruvian hat town, and its narrow old streets are often thronged with peasants and buyers, when the middlemen come to barter with the natives.

The Republic of Panama, taking advantage of the name given to the hats when they, long ago, passed through the Isthmian port, now buys straw from Ecuador and brings teachers with it to instruct the Panamanians in the art of weaving. A few of the Panama hats of commerce do come out of Panama, but Ecuador is the great producing center for this sort of headgear.

I have before me, as I write, the shrunken head of an Ecuadorian savage, one of those uncanny, mummified relics from far beyond the Andes—the wild forest land of the Upper Amazon.

The Jivaros, a brave, freedom-loving tribe of the eastern tropic wilds of Ecuador, who have never been really conquered, thus preserve the scalp of the enemy, removing it in one piece from the neck upward and drying it with hot stones in such a manner that the skin retains the features of the victim, although it shrinks to about one-fourth the original size. The hair and eyelashes remain as in life. These Indians are enormously proud of their ghastly trophies, but until recent years they represented only the prowess of war. Unfortunately a few of the heads found their way out

STATUE OF GENERAL BOLIVAR.
GUAYAQUIL, ECUADOR.



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suppressed. A savage is only a savage, but the Jivaro would better learn to plant rubber and weave hats. Here is a great field for some practical missionary! Who will take the job?

Though political cabals and internal strife have been the curse of Ecuador, in time the country will, no doubt, reach a firm and stable condition of society and government. The natural resources of the country are very great. In rubber, sugar-cane, beautiful and precious woods of every sort, tropical fruits of every variety, and in many other resources, this equatorial land is rich. American enterprise is now entering Ecuador, and the future promises better things for this country.

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A SHRUNKEN HEAD, TROPHY OF
THE HEAD HUNTERS, BROUGHT
FROM INTERIOR ECUADOR.

PERU

Area, 696,000 square miles, or about three and one-half times that of France, or twenty-one times as large as the State of Maine—Population, approximately 4,000,000, a little more than half Indian, estimated—Vast deposits of silver and copper, also some gold, coal and petroleum—Sugar and rubber important products—Exports from Peru into United States in 1911, \$5,597,123, imports into Peru from United States in 1911, \$9,314,030—Army, peace footing, 4,000—Capital, Lima, population, 140,000.

CHAPTER V.

PRESENT AND ANCIENT PERU.

LEAVING moisture-soaked Guayaquil behind us we again sailed southward. The transition from humidity to aridity is swift and surprising. One leaves Guayaquil, perhaps, in a torrential downpour of rain at midday, and by midnight is sailing across a point opposite the divisional line between Ecuador and Peru, where actual rain has probably never been seen to fall, and where no tillage of the earth is possible save by the aid of irrigation. Tilling the soil in the damp region back of Guayaquil is literally, though honorably, a business of "muck-raking," while along the coast of Peru husbandry is a matter of constantly "laying the dust."

One explanation of this marked dissimilarity of climatic conditions is that the cold ocean current from the Antarctic region, which bathes the whole South American western coast, at this point, and for more than four thousand miles southward, presses in closer to the shore and chills the upper atmosphere to such a degree as to prohibit the formation of moisture. However, my own conclusions are that the phenomenon can be attributed to a seemingly more obvious cause. I observed that the winds blow almost constantly from the east. It is probable then that the atmosphere along the Atlantic coast, becoming filled with moisture and moving westward across the vast warm slope

ON THE COAST WHERE THE SAND DRIFTS.

of eastern South America, precipitates its burden of rain as it proceeds. As the air currents draw westward over the mighty barrier of the Andes Mountains the last of the moisture is drawn from the atmosphere in the form of snow, and the winds come down across the shores of the Pacific literally "sucked dry." This seems to me, at least, the most probable reason.

Whatever the true explanation, the fact remains that the whole coast of Peru is pitiably devoid of moisture. It would be an actual desert except for the snow-water streams that flow down from the Andes Mountains, which are twenty to two hundred miles distant from the shore. The houses of the people in the little towns along this endless, wavering ribbon of desert are for the most part constructed of bamboo lath and plastered with mud. Should the mud drop off it matters little, but for the fact that this permits more sand to blow in. Sand is the nightmare of the lives of these people, for it is everywhere, shifting and drifting in every breeze like fine snow,

A HIGH PLATEAU VILLAGE, WHERE STREAMS START.

piling up in one spot today and shifting to another spot tomorrow, upon the wings of another breeze.

Payta, Peru, five hundred miles south of Guayaquil, was my next stop. As we approached the port, the first object to greet the gaze was a large cross, erected on a bluff that extends out into the ocean south of the city. We were told that it was placed there by the Church to drive away evil spirits, but it is more probable that it was erected as a beacon for the guidance of ships at sea.



A GROUP OF PANAMA HAT WEAVERS.

Payta is the first port of Peru as one approaches from the north. It is also the greatest Panama hat market in Peru, and during our stay in this port possibly fifty peddlers came aboard the ship with sacks of hats. The first price asked was about equal to the retail price charged for a hat of the same grade in the United States. But it is doubtful if they made any sales at those figures, for people who travel much learn the value of "dickering" with merchants of this class and seem to take delight in the operation. If the prospective customer is keen enough in driving a bargain he can usually get a hat for about

one-third the original price asked. I saw some good hats sell as low as \$2.50 each.

We remained in Payta about six hours, taking aboard and discharging much cargo, during which time officialdom was very much in evidence. The port officers and quarantine inspectors, clad in gorgeous uniforms, went about their duties with impressive ceremonies, which were at last brought to an end, and the steamer weighed anchor and sailed away toward the south.

Between Payta and Callao there are three ports at which we called—Eten, Pacasmayo and Salaverry. At each one a long iron pier reaches out into the ocean, one of them being 2,700 feet long, but as the water is shallow our steamer anchored out half a mile from the end of the pier. As the surf rolled the boats so that it was dangerous for passengers to leave the steamer by the ladder, they were taken off in iron cages, which were swung out over the waiting boat by a crane.

These towns all looked alike, nothing but low iron-roofed buildings, set in a waste of sand. But at each town a railroad starts and runs back into the desert to good towns on the streams that head up in the mountains, which disappear in their course, all of the water being used for irrigation purposes before it reaches the sea. Thus the size of the rivers is reversed,

VIEW FROM OUR STEAMER OF PAYTA, PERU.

the big end being at the source.

From Salaverry to Callao we sailed along a rugged, dry coast upon which one would die of hunger and thirst if shipwrecked. At Callao we parted company with many interesting persons met during the voyage, most of them being American mining men and mining engineers on their way to work on enterprises financed by American capitalists. Four young men were going from the United States to Chile to work at a copper smelter. One of them wanted to know if Chile was a monarchy! From such illustrations of ignorance it is evident that more books should be written on South America.

One of the first interesting facts that presented itself after our arrival at Callao was that this region is in the earthquake belt. Callao itself, which is situated seven miles from Lima, has been rebuilt several miles away from its original site. The entire town disappeared during an earthquake some years ago, the ocean sweeping in over where it had stood. The harbor, one of the best on the Pacific coast, is over the site of the old city of Callao.

VIEW IN THE HARBOR OF CALLAO, PERU.

The new buildings of Lima are now being constructed of steel and concrete, the same as in San Francisco, Cal., and are in marked contrast to the other buildings, which are low and fragile. Slight shocks of earthquakes are common, and upon a morning directly after my arrival the toilet articles on my dresser danced a merry jig from a "quake."

Lima, to a North American, is especially interesting, as it was the real seat of Spanish Government on the American continent, North and South, for nearly three hundred years. Pizarro, after overpowering and robbing the Incas, built Lima in 1535, and it remained the Spanish capital of South America until 1825. Peru was the last country in South America to become a republic. It has the oldest university in the Western Hemisphere, I believe, and the oldest and most celebrated monasteries. The inquisition tortures were practiced here, on religious and political prisoners, for a century after public sentiment forced Spain and our New England colonies to methods of greater tolerance.

The Peruvians are a very brave and proud people, and in Lima are to be found descendants of much of the best blood of Spain. The Peruvians have been overcome in wars, but never conquered. Obviously there must be immense wealth back of the people of Lima to enable them to recover so quickly after the injuries sustained in their disastrous war with Chile, when nearly every home was left a ruin, and parks and public buildings were destroyed. Today there is no evidence of this terrible conflict; in fact, Lima is quite a new, up-to-date city. The wars have done for it what the great Chicago fire did for that city—made possible the replacing of old buildings with new and modern structures, and gave the city enterprise and brought it capital. The population of Lima is 140,000. It lies seven miles from the Pacific Ocean and is five hundred feet above sea level.

While I was in Lima the season was that which citizens of the United States would designate as "dog days," the hottest period of summer. Still, though Lima is but eight hundred miles south of the equator, it was cool enough at night to sleep under sheet and blanket. There the thermometer never goes above 90 degrees in the daytime, and sunstrokes are unknown. The streets are well paved, and being narrow, create a natural

THE CATHEDRAL IN LIMA, PERU.

draft like a tunnel, and as the buildings are set close together, making a welcome shade, the pedestrian is never overheated as in some of our large cities. In the center of each house there is a large court or *patio*, filled with flowers, plants, ferns and palms so common to all Spanish and tropical countries. Here the family lives as privately as if it were not in the heart of the city. This is a common style of architecture, and the houses of the better class in the country are constructed in the same way.

The Rimac River irrigates a great valley, and on this, the greatest river of the dry coast of the South Pacific Ocean, the city of Lima is located. The high falls of the Rimac furnish abundant power for electric railroads and manufacturing plants, and the streets of the city are well lighted at night by electricity, while all the houses are wired and are illuminated in the same manner, as the current is furnished very cheap. There are many little parks and public squares, adorned with statuary, in addition to the larger parks, in which the people take great pride, gathering there in the evenings and holidays for recreation.

TOMB OF FRANCISCO PIZARRO, IN THE CHAPEL OF THE VIRGIN
IN THE CATHEDRAL, LIMA, PERU.

It was in one of these parks, a few years ago, that a mob—dignified in South American countries by the name of revolutionary party—took President Leguia, an honest and brave executive, after murdering his guard, and, placing him with his back to the statue of Bolivar, the Liberator, ordered him to sign a paper turning over the army and navy of Peru to the mob.

They re-enforced their arguments with revolvers pressed against the President's body, and declared they would kill him if he declined to sign the paper. He replied that he could die

INTERIOR OF THE CATHEDRAL, LIMA, PERU.

but once, but Peru must live, and his death would be avenged. Fortunately, just then a squad of soldiers came along, and the commander, imagining the trouble was some sort of a street brawl, ordered the crowd to disperse; as the mob showed no signs of obeying he fired into it, little dreaming that the President of the nation was being exposed to danger of death at the hands of his friends. In the scramble of the mob to escape being shot, the President fell under a man who was shot dead,

and this, no doubt, saved his life. The young commander is now a hero and has been promoted. President Leguia refused to execute any of the men engaged in this "revolution," though many of them were sent to prison. I fancy that we of the United States would not have dealt so humanely with such a "political party." Just the same, no matter how much Peruvians may differ on home matters of government, they are a unit the moment their country is assailed by a foreign foe. Their loyalty to their country is above any other consideration, and one is compelled to admire them for it.

There are many evidences throughout Peru of a prehistoric race that possessed a high degree of civilization. Ruins of temples, houses and entire cities, have been unearthed, and the discoveries made are mute witnesses to the intelligence and thrift of this remote people. In their burial mounds have been found pottery, gold and silver vessels, and ornaments of rare carving and workmanship. These show that culture and enlightenment must have widely obtained among the now obliterated race, while the cotton twine, woven cloth and cobs of maize unearthed, denote their skill in manufacture and practical husbandry.

WOODEN STATUE OF DEATH IN
CHURCH OF SAN AUGUSTIN,
LIMA, PERU.

Some students of ancient Peru believe that there was emigration from China to this country thousands of years ago, the unearthed ruins bearing resemblance to the early Buddhist temples in Mongolia, while even today, some of the coast natives look like the Chinese and are able to understand the Chinese tongue.

However, other antiquarians have advanced the theory that the very earliest occupants of Peru were a blonde people, the settlement having been a colony from Plato's mythical continent, Atlantis, which sank into the sea before man had a written history. However that may be, the mighty nation of the Incas, now the degenerated Indians of Peru, is supposed to have come originally from the regions about the Amazon River. It is a curious fact that the map of the bottom of the Atlantic Ocean, made through deep sea soundings by the American and British Governments, shows a vast submerged plateau toward the eastern side of the Atlantic, and that there are two submerged ridges connecting this plateau with Europe, and another ridge connecting the plateau with South America, just below the mouth of the Amazon River.

This seems to agree with Plato's description of the supposedly fabled continent of Atlantis, which sank into the sea in a convulsion of nature, the submergence of which gave rise to the fabulous story of the destruction of the prehistoric world by a deluge. The theory, then, that the prehistoric peoples of South America had their origin through emigration from Atlantis, by way of a ridge of land that joined Atlantis to South America near the mouth of the Amazon, seems not altogether impossible, though the truth, of course, can never be fully known.

The history of Peru is so dramatic and extraordinary that I fancy the reader would be entertained by a few words relative to its principal events.

About the year 1000 there were several tribes of Indians inhabiting the high plateau about Cuzco, the old Inca capital, and from one of those tribes a great leader arose, named Manco Capac, who claimed descent from the Sun God. The word Inca means "lord," and Manco Capac was the first Inca chief,

his direct descendants ruling the vast Inca domains until the Spanish conquest.

Today Peru is profiting from the great things the Incas did with the crudest sort of tools. They drilled with drills made of pure copper, having a method of tempering the metal until it was as hard as steel, a method that is unknown today, being numbered with the lost arts. They built miles of military roads, reservoirs, canals, and irrigating ditches. Whole mountainsides were terraced up and land made over these terraces, which apparently must have consumed years of labor. There was no leisure class in those days, every one being obliged to work, and the products were divided between the Government, the priests and the people. If there was a scarcity in one sec-

PORTION OF INTERIOR OF MONASTERY OF SAN FRANCISCO, LIMA, PERU.

tion of the country it was made up by drawing on Government storehouses in a richer section.

The wealth of the Incas was enormous, and they had numerous rich gold, silver and copper mines, which they worked in the crudest manner. Among these mines was the famous Cerro de Pasco, which lies in the heart of the Andes Mountains, 14,000 feet above sea level. The Incas were splendid fighters, and they conquered the Indian tribes of what are now Peru, northern Chile, northwestern Argentina, Bolivia and Ecuador. Thus in time the Inca Emperor controlled a vast area and was monarch of over 2,000,000 hard-working people.

Their temples to the Sun God, and the palaces of the Inca Emperor, were built of great stones, so cut as to fit evenly one upon the other, and the inside walls were treasure houses of gold and silver ornaments and decorations of precious stones, and, it is said, they ate from gold plates.

Atahualpa was the last Emperor of the Incas. During the early part of his reign he was constantly at war with his brother, Huascar, who tried to usurp the throne. But Atahualpa, with his enormous resources and an army of 70,000 men, proved too much for the traitorous brother, and after several battles succeeded in completely wiping out of existence the rebel and his band of followers. At this time the Inca empire was at the acme of its glory, and it included all of the habitable parts of Ecuador, Peru and Bolivia, three-fourths of Chile, and a large part of Argentina, stretching 2,200 miles north and south, and from the Pacific to the eastern foot of the Andes Mountains. Having conquered the entire country about them, and feeling secure in their empire, like many another nation in the history of the world, they relaxed in precaution and gave themselves up to the enjoyment of life.

In 1532 word was brought to Atahualpa that a company of two hundred strangers, having white faces on which hair grew, and riding on strange animals, had landed on the coast at Tumbez, on the Gulf of Guayaquil. This was the beginning of the Spanish invasion under the famous adventurer, Pizarro, who had crossed the Isthmus of Panama with Balboa some years before and had heard stories of the great treasures in the land to the south. He reached what is now Peru, saw for

STATUE OF GENERAL BOLIVAR, LIMA, PERU.

himself the wealth of the country, and decided to go to Spain and interest the Government in fitting out an expedition to conquer and loot the kingdom of the Incas. He had an audience with the King of Spain, who authorized him to conquer and settle Peru for Spain and gave him money to fit out an expedition. Pizarro, on his part, was to remit to the royal treasury one-fifth of the gold he would get in Peru.

It was Pizarro, with his two hundred fighting adventurers and horses, of whom the Inca Emperor had heard, and he sent a friendly message to Pizarro, asking the privilege of visiting the Spaniard's camp outside of Cajamarca. Pizarro willingly granted the request, for he had formed a daring plan to capture and make a prisoner of the Inca Emperor in his own camp. Atahualpa, not suspecting treachery, left his camp and was borne on a litter into the town of Cajamarca, surrounded by only a few of his soldiers. Through an interpreter Pizarro demanded that the Inca Emperor should become a subject of the King of Spain and join the Catholic Church. This the Emperor haughtily refused to do, whereupon a priest who

accompanied Pizarro called out, "Fall on, Christians! I absolve you!"

Then followed one of the world's greatest tragedies. The Spaniards slaughtered the Inca's bodyguard, for the latter could do nothing against the coats of mail worn by the Spaniards. The Emperor was dragged from his litter and made a prisoner, being held as a hostage in a large room, which was closely guarded. One day he sent for Pizarro and said: "I will fill this room in which I am held a prisoner with gold as high as I can reach, if you will let me go free."

Pizarro agreed, and gold was brought in by the faithful subjects of Atahualpa until the necessary ransom was complete, in all amounting, it is said, to about \$23,000,000 of modern money. One-fifth of this huge sum was sent to Spain and the rest

divided among Pizarro and his men, and even those who got the smallest part were made rich for life.

Pizarro, as might have been expected—for he was one of the greatest thieves of all history—did not keep his word with the Inca Emperor, and instead of freeing him, charged him with the murder of his brother and had him executed on the public square of Cajamarca. During the confusion that resulted from this deed, Pizarro marched to Cuzco, captured it, and having received additional soldiers in the meantime, established a capi-

UNDER THE GRAPEVINES, SAN FRANCISCAN MONASTERY, LIMA, PERU.

tal in the Rimac Valley at Lima. The Spaniards quickly conquered the various Indian tribes throughout the Inca empire, and taking possession of the land, divided it up into large estates, compelling the Indians to pay tribute to them.

Thus the great Inca empire fell, and the Spanish conquerors were left to fight among themselves for the rich country and spoils they had gained, and fight they did, each captain claiming more territory and riches than the concession from the crown allowed him. As a result there was almost constant warfare in the country. Pizarro had established himself in Lima, where he lived in great luxury, and having been made Governor, he spent a considerable sum in beautifying the city and enlarging it.

While Pizarro's soldiers were jealous of one another's possessions, and his captains fought among themselves over the division of the spoils, some of his generals were jealous of their leader's power and wealth, claiming that he had taken more than his share. Therefore, one night when Pizarro was eating his dinner in his palace, surrounded by all the luxury gold could buy, twenty of his enemies rushed into the room and killed him, though he fought to the last with great courage.

A royal commissioner, Vaca de Castro, sent to Peru by the King of Spain, arrived in the midst of the confusion precipitated in Lima by the murder of Pizarro, and it was fortunate that he came so opportunely, for, having a commission from the King, he became the legal ruler, thus terminating the inevitable fight for Pizarro's mantle among those who had murdered him. The guilty ones were executed in the public square in Lima.

First one, then another of the old bloodthirsty adventurers who had been with Pizarro, and who had remained loyal to him, were appointed Governor by the King of Spain. But they did not send home as much gold as King Charles desired, and finally he sent to Peru the Marquis of Cañete to govern, with the title of Viceroy.

The Spaniards had conquered but not colonized the country, so the new Viceroy brought with him a large household and staff. Under his rule churches, convents, and monasteries were built, and today they are most interesting and beautiful buildings. Among the Viceroy's entourage were a large number of

beautiful Spanish nuns, one of whom was a young girl of nineteen, said to be the most beautiful of all. Her life story is very sad.

At the age of seventeen, so the chronicle runs, she had a lover who was a poor young man. As neither of them had any money, the young man decided to go to Peru to gain a fortune in the new country. Nearly two years passed without tidings of him, and then, growing impatient, she decided to go to Peru herself and learn the reason for his silence. As she had no money, and there was no other way for her to get to Peru, she became a nun and joined those who were going with the Viceroy. When she arrived in Lima she found her lover seriously wounded and was just in time to have him die in her arms. It is said that she devoted her life to nursing the sick, in which work she was so happy and contented that the expression of her face became as beautiful as the Madonna's.

A succession of governors and captain-generals was sent out from Spain in the years that followed, and vice-captain-generals ruled in Argentina, Venezuela, Colombia, Ecuador and Bolivia, whose principal duty was to wring money from the inhabitants to swell the treasury of Spain. Such a system of extreme tyranny and spoliation as was this old Spanish conquest finds hardly a parallel in human history. Finally the inevitable storm of revolution broke out all over South America. This was in 1806, and in rapid succession the Spanish officials were overthrown in Argentina, New Granada, Chile and Venezuela, only Peru remaining loyal to the crown. There was constant fighting each year, General Simon Bolívar being the brilliant leader who organized the campaigns in the war against Spanish domination.

In 1820 Bolívar sent one of his lieutenants, General San Martín, with about five thousand Argentinians and Chileans to Peru, to wrest the country from the Spaniards. For two years there was constant fighting, and in 1822 San Martín was joined by Bolívar, with his numerous well-trained soldiers, and in 1825, after many great battles, Peru was wrested from the Spanish crown and the war for independence was over. Only Callao castle at Callao held out, but after thirteen months it, too, gave

PERUVIAN TROOPS AT RAILWAY STATION, LIMA, PERU, GOING TO FRONT IN WAR WITH ECUADOR.

up, and with its surrender was hauled down the last Spanish flag on the South American mainland.

The Peruvians made Bolívar President, but he left the country to go to the United States of Colombia, of which he was also President. Peru's independence began without any basis for a strong, stable government. The interior, inhabited by Indians, who always got the worst of it no matter who governed them, and the long strip of coast divided by local jealousies, created a condition of antagonisms that defeated all efforts to form a compact nation.

The only thing that could unite the Peruvians was war with a common foe, and a pretext for that war was soon found. Bolívar's government was in power from the Caribbean Sea to Argentina, and he expected to become Emperor of all South America. But the Peruvians had grown tired of being governed by a nonresident President, and they desired very much to be rid of Bolívar's rule and of the soldiers he had left to keep Peru for him.

The inhabitants at length arose in revolt and for several years a fierce conflict was waged, which finally ended in the defeat of Bolívar. Thus, being rid of the common foe, the internal strife of Peru began again, and the country was in a constant state of revolution. A President would be elevated to power, and in a few weeks he would be deposed and another put in his place. Sometimes the change in Presidents would occur peacefully, but more often with much bloodshed and disaster to the country. Twenty years of independence brought Peru no nearer to a stable government, and the situation seemed to grow worse year after year.

There arose in this emergency a quiet little soldier, Ramon Castilla, who had fought in the war of independence and the civil wars, but always on the side most partial to good government. He became President in 1845, and from that date the Republic of Peru began to thrive. He paid his soldiers regularly, rewarded his friends, relieved agriculture of taxation, paid interest on the foreign debt Peru had made during the war of independence, and refunded it with the accrued interest that had already amounted to more than the principal.

Telegraphs and railways were constructed, and no money

was wasted on a useless army of officeholders. Castilla utilized the millions of dollars coming into the treasury of the country from the big guano and nitrate deposits in useful improvements, and inexorably insisted that every cent should be made to count for the good of his country. He encouraged foreign immigration, and Chinese coolies came in large numbers, also many Europeans, among whom were seventy Basque peasants from Spain, some of whom were killed in a row on a plantation on which they were working. Spain demanded an apology from Peru and \$3,000,000 indemnity. Peru refused both, broke off diplomatic relations, and Spain sent a big fleet which seized the valuable Chincha guano islands. A treaty of alliance was made with Chile; war was declared on Spain, and the batteries at Callao, the seaport of Lima, were re-enforced and a big force of volunteers manned the guns. When the Spanish fleet arrived in 1866 they were unable to make a landing, and their ships were so badly damaged that they gave up further hostilities.

Nitrate, as the reader doubtless knows, is the most valuable of all fertilizers of the soil. The discovery of great fields bearing this commodity along the seacoast of South America has been the basis of much strife as well as of great wealth. The nitrate-bearing strip along the coast is some three hundred and fifty miles in length. Peru owned the northern one hundred and fifty miles, and prior to 1860, Bolivia claimed the remainder. After the discovery of the nitrate fields the Republic of Chile crowded upward along the coast and began to mine for the valuable stuff. Peru made

A DESCENDANT OF THE INCAS AND
HIS MOTHER.

a secret treaty of alliance with Bolivia in 1872, which later became public, and which Chile believed was aimed at her miners working in Bolivian territory. She began buying war-ships, and to protect her interests seized the Bolivian ports, after which action Bolivia declared war. Peru could not, under the circumstances, ignore her treaty with Bolivia, especially as she did not want the disputed territory to fall into the hands of Chile. Her offers of arbitration were refused, Chile declaring war in April, 1879, and opening hostilities by blockading the Peruvian ports in the extreme south.

The Chilean navy was far superior to that of Peru, and the latter was soon destroyed, though it fought to the bitter end. Being in command of the sea, Chile could land an army wherever she pleased, and Antofagasta was chosen as the most vulnerable point. Ten thousand men were landed there, and though every foot of the way was hotly contested by the brave Peruvians, the Chilean army finally arrived in the great nitrate province of Tacna, the treasury of Peru. Not only was this lost, but Lima, the capital, and all points on the coast were open to attack.

Just at this critical moment a revolution broke out in Lima, the President having sailed for Europe. The Chilean army, heavily re-enforced and equipped with modern guns, advanced from Tacna, and although the Peruvians fought with great courage, their country lay at the mercy of Chile. It was at this point in the hostilities that the United States of North America offered to act as mediator. Chile demanded an indemnity and a formal cession of the nitrate regions. Peru refused this, whereupon Chile, with a splendid army of 24,000 men, advanced on Lima. The Peruvians were driven back, seemingly by inches, so hotly was the advance contested, and the slaughter was heart-breaking. Over 5,000 Peruvians were killed just outside the city, and 4,000 were taken prisoners. The Chilean losses at the same time were 5,000. On January 17, 1881, the Chilean army took possession of Lima, and it was not until five years afterward that the Peruvian flag again waved over the capital.

The Chilean army withdrew in 1886, leaving 4,000 men to see that the treaty of peace, made October 20, 1883, was rati-

fied. The provisions of this treaty differed but little from what Chile had demanded before. The money indemnity was waived and half the guano receipts, revenues received from the soil fertilizer gathered on the Guano Islands, were left to Peru. The provinces of Tacna and Arica were to be held by Chile for

A SHRINE IN A CHURCH AT COPALMA, PERU.

ten years, at the end of which time a popular vote was to decide which should hold them, the losing country to receive \$10,000,000 from the other.

It would have been better for the interests of permanent peace had the fate of the provinces been definitely fixed, as

Chile and Peru have never been able to agree upon the terms under which the vote of the people should be conducted. Chile still has the provinces, and Peru is still trying to recover them. I have recounted these historic events in as few words as seemed possible. In truth, the full history of the Incas and the operations of Spain in Peru, together with the later history of the Peruvian people, would make several interesting volumes.

Peru of today is in much the same political position as that occupied by the United States twenty years ago. The old-timers, those who were saddened by the results of the great war with Chile, are fast disappearing, and a new element, one of progression, one desiring peace and commercial stability, has taken the place of the old elements. The Peruvian aristocracy has learned its lesson in the hard school of adversity, and now competes with the commercial classes in sober, serious attention to industrial and governmental matters. Every division of the people desires to contribute to the regeneration, financial, political and moral, of their country.

RURAL HOUSE IN SECTION OF PERU WHERE IT NEVER RAINS.

I had the honor of being received by President Leguia, who is a very able, energetic man. He was very much interested in the United States, his son, when I was in Peru, being at college in the University of Wisconsin.

THE STEEL DOCK AT PACASMAYO, PERU, 2,400 FEET LONG.

CHAPTER VI.

ON THE ROOF OF THE WORLD.

“**B**EYOND the Alps lies Italy,” is a phrase that is familiar to every schoolboy. Beyond the Andes lies a country that is old in history, yet little known. It is just as probable that the Garden of Eden was located there as in any other of a dozen places claimed for Mother Eve’s fabled apple orchard.

The world advances only with transportation. This is a fact that government and economists now generally recognize. To water must be given the first place in both tonnage and cheapness, but railroads must be depended upon for reaching the more inaccessible and isolated portions of any country. The commercial growth of South America has been slow, because adequate transportation to the interior was not recognized and established in an earlier day. The unstable Governments of the past prevented capital from building railroads, ruined credits, and prevented prosperity. It is quite different now.

The Panama Canal will benefit Peru very greatly, as it will bring her products nearer to the markets of the world than those of any other country in South America. The canal will also open up Peru more fully as a market for the products of the United States, as it will be easier and cheaper to reach her ports, by rail and water, from east of the Rocky Mountains, than California. By looking at a map of North and South America you will see that the Panama Canal and Peru are almost south of New York, not New Orleans, as most people believe. The reader will, therefore, understand why I am giving so much space to Peru in this volume.

In 1883, when the war with Chile was over, Peru had an immense foreign debt and no income with which to pay either principal or interest. The railroads belonged to the Government and, like many Government-operated properties, were practically worthless to the country. However, it formed a

AMONG THE MOUNTAINS ON THE PERU CENTRAL RAILWAY.
NOTE THE SWITCHBACKS AND ZIGZAG STYLE OF TRACK.

basis for a settlement of the national debt, owed largely to English capitalists.

In 1891, the "Peruvian Corporation," an English company, was formed, and it assumed the \$250,000,000 debt of Peru, in consideration for which act the Government ceded to the corporation all the State railroads of the country, some mines and lands (all unproductive), and in addition agreed to pay \$400,000 cash a year for sixty years and turn over the income from one-half of the Guano Islands deposits. The guano deposits pay the corporation over \$500,000 a year, and altogether the net receipts of this \$100,000,000 corporation in one year amounted to about \$2,500,000, or one per cent on the debt from which Peru was relieved. Of course no one knows what the corporation paid for these bonds and debts, as they were considered of little value at the close of the war.

The year 1910, Mr. W. L. Morkill having taken charge as president of the properties, was the best in the history of the corporation for net earnings. The railroads are kept up like Continental roads, and persistent scientific work has made the roadbeds very nearly perfect. The Peru Central, which runs from Lima east up over the Andes Mountains, is, to quote what

TICLIO, ON THE PERU CENTRAL RAILWAY, THE HIGHEST
TELEGRAPH STATION IN THE WORLD.

THE OROYA MINES ON THE PERU CENTRAL RAILWAY IN THE
HIGH ANDES, PERU.

every writer, engineer and railroad man who has seen the road says, "the most wonderful railroad in the world." Its altitude is the highest occupied by any railroad, being at one point 17,500 feet above the level of the sea. You cannot write about South America without mentioning the Amazon River, the Incas, the prairies of Argentina, and the Ferrocarril Central of Peru, any more than you can omit the Niagara Falls, Chicago, New York, or the Yellowstone Park, in speaking of the United States of North America.

Thirty years ago I "wrote up" a man for a paper for which I was reporting in Fargo, North Dakota. The man had just arrived in the West from serving a term in the penitentiary in Philadelphia, Pa., and his name was Charles T. Yerkes—afterward of world-wide street-railroad fame, having built, during his eventful career, the Underground Railway in London, England, and extended the street car lines of the North and West divisions of Chicago until they formed a gigantic system. The story I wrote for my paper about Mr. Yerkes was, I think, a good one, and the proprietor and editor—the same person—sat in his big armchair and rocked as he read it. When he finished it he quietly said: "Can't use it, my boy."

"Why, Major?" I asked.

"Because, my boy, when a man crosses the Red River of the North his past is forgotten." I learned afterward that my employer also "had done time back East," and that was the "reason why."

The Peru Central (or Oroya) Railroad, the Eighth Wonder of the World, was planned, engineered and the most difficult portion built by a man who "couldn't go home to the States." His name was Henry Meiggs, a soldier of fortune who was born in New York State. After making and losing several fortunes in the East, he went to California, where he engaged in business on an extensive scale and soon got into trouble. He left California "while the going was good" in a ship chartered for his own use, and landed at Lima. Had he not possessed "a record" possibly his name would not have stuck to the great railroad, which is a monument to his genius. He "made good" in Peru, paying back the money he owed when he left San

THE SNOW-STREAKED PEAKS OF THE ANDES ALONG THE PERU CENTRAL RAILWAY.

Francisco, with interest, and opening up a new-old country to the world.

Going up this wonderful railroad from Lima to Galera tunnel, a distance of one hundred miles, it took a 112-ton oil-burning locomotive, pulling four cars, nine hours to make the ascent.

After passing through some sixty tunnels going up and the 4,000-foot Galera tunnel at the summit (15,665 feet above sea level), the road drops down 2,000 feet every hour for two hours, and at a height of about 12,000 feet reaches the town of Oroya, which lies between the two ranges of the Andes. This "roof of the world" extends from Colombia to Argentina, north and south, through Ecuador, Peru and Bolivia, for more than two thousand miles, or as far as from New York to Denver. In all directions can be seen villages, cattle, sheep, llamas and evidences of mining. Here it is possible to support a great population.

From Lima, the journey up this amazing railroad probably cannot be equaled in strangeness and grandeur anywhere else on the globe. There really is no language adequate to express it. Leaving Lima, the road follows the foaming, roaring Rimac River for forty miles through a verdureless desert, save where irrigation is employed. In spots where water is drawn off from the river there are fields of corn, waving stretches of sugar-cane, tall palms and banana trees. In these sheltered, irrigated "pockets" among the foothills of the Andes grow apples, peaches, melons, oranges, custard apples, strawberries, delicious avocado pears, and a number of varieties of tropical fruits that the Northern man is not used to see growing. As the engine climbs upward, the Andes tower everywhere, gaunt, treeless, mighty, awesome. From the train one looks down into the depths that turn the head dizzy and bring the heart up into the throat; mountain walls spring upward, seamed, soaring, swart; Alpine flowers cling here and there to the rocks, though one seems in a world where the very bones of the earth are broken and piled up in indescribable and appalling masses. In many places on the way we saw impressive evidences of the old Inca prowess and endurance. Here and there the remains of the splendid roads they cut in the mountainsides could be seen, and terraces on the hillsides, sometimes twenty or thirty of them,

one above another, were mute but tremendous witnesses of the patience of this ancient people. Men are still living upon and farming these wonderful terraces, and at times we saw goats and sheep far up the steep and meek-eyed, long-necked llamas bearing burdens along the dizzy roads. It was a journey never to be forgotten.

The main line of the Central Railroad ends at Oroya, one hundred and thirty-eight miles from the Pacific Ocean, and from Oroya a branch runs south eighty miles to Huancayo, which lies in a beautiful valley only ten thousand feet above sea level. Possibly the greatest Indian market in Peru is found there, and but little change has occurred in hundreds of years. When the great highway of the Incas, from Cuzco to Quito, passed through this valley, the country supported a population five times as great as at the present date.

An effective description of the scenery of this wonderful cloud-realm would be possible only to a poet. Even photographs give but a faint idea of the grandeur of the mountain ranges, in which the glory of the sunset and the miracle of the dawn are never ending marvels. Beautiful natural scenery

doubtless has always been a powerful influence in the spiritualizing of man, and looking abroad upon this inspiring kingdom of the Incas, one can easily fancy why they built temples and worshiped the Sun, the Creator's most sublime manifestation.

However, we must be practical and note the work of the men of the present day, for we live in a commercial era under a new order of life. This extraordinary mountain railroad forces this fact upon one. From Oroya it turns northward to Cerro de Pasco, eighty miles away, this latter portion of the line belonging to the Cerro de Pasco Mining and Smelting Company, which constructed the road seven years ago in order to get their supplies to the mines and their copper to market.

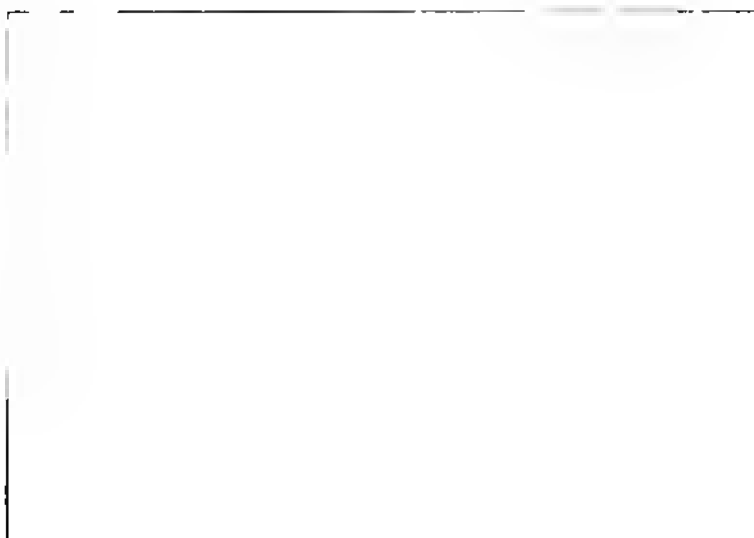
We arrived at Cerro de Pasco, where the smelter of the copper company is located, at eleven o'clock at night. We were 14,300 feet above sea level, and all about us were the towering snow-capped peaks of the Peruvian Andes, many of them over 20,000 feet above sea level. The Cerro de Pasco mines and smelter are owned by a big American syndicate composed of James B. Haggin, the veteran copper man, J. Pierpont Morgan, and the Hearst and Vanderbilt estates. Mr. Louis Haggin, a son of James B. Haggin, is president of the mining company, as well as of the Cerro de Pasco Railway Company.

The mines are situated near the city of Cerro de Pasco, some six miles from the smelter, and we made the trip to them on a hand car driven by four Cholo Indians. There are about two thousand of these Indians employed as laborers in the mines and smelters, in addition to some two hundred salaried men, who are mostly Americans. The superficial underground workings of the mines cover an area one mile by one-half mile and there are, altogether, about one hundred miles of workings. The mines are worked from two hundred to six hundred foot levels. From the two hundred to the four hundred foot levels they were taking ore when I was there, and from the four hundred to the six hundred foot levels they were prospecting.

The ordinary monthly output of the mines is 27,000 tons of ore. They have three grades of ore, No. 1, 7 per cent and above; No. 2, 3 to 7 per cent; No. 3, 3 per cent and below. The Cerro de Pasco mines were worked by the Spaniards years



MINES AT CASAPALCA, PERU.



OLD SILVER MINES, CERRO DE PASCO, PERU.

ago for silver, and many of their levels have been found and timbered up to prevent cave-ins. All of the timber used in the mines is brought from Oregon. They are fairly dry, particularly at the two hundred and three hundred foot levels.

The city of Cerro de Pasco is the highest town in the world, and has a population of about 12,000 people, in most part Cholo Indians. I rode through the city on a mule in a blinding snow and hail storm. However, on a later tour I discovered that the streets were narrow and dirty, the houses mostly of wood, covered with tin roofs, many of which were patched with portions of tin cans.

The power for the smelter is supplied by coal taken from a mine owned by the company, some twenty miles away. From the smelter they ship ninety-eight per cent pure copper, and get enough gold and silver from every ton to pay the freight to the company's refining plant at Perth Amboy, New Jersey.

We had heard a good deal about *soroche* (mountain sickness) before leaving for the mines, and discovered later that it is like an English joke, not to be laughed at. We did not believe, when we were in Lima, all that we heard about this dreaded sickness, but when we reached Cerro de Pasco, fourteen thousand three hundred feet above the sea level, every member of the party was attacked, and it is the most awful thing of the kind I have ever experienced. Plain, old "sick-at-the-stomach" does not begin to describe the awful nausea that grips and racks the sufferer, who gasps for breath and feels that his heart is about to stop beating, and oh! such a headache! The throbbing, beating pain gives one the impression that his head is going to blow to pieces.

We sent for a physician, a young Dr. McDonald, who had been at the mines only two weeks. He took our temperatures, felt our pulses and then remarked, "You know, I have been here but a short time, and when I came I had the *soroche*. I tried all the medicines I had to make me feel better, but none did me any good, so what is the use of me giving you any? It is beyond me, this *soroche*, and before I came into the Andean altitudes I had never heard of it. I am sorry I cannot relieve you."

We were left to suffer and groan and wait for the sickness

to wear itself out, and it lasted three days! One has no appetite, and when he stands upon his feet or attempts any exercise his head swims so that the only feasible thing to do is to lie down. Then one minute he is afraid he will die, and the next he prays that he will.

Returning to Lima, I accompanied the general manager of the Central Railway in his private car from Oroya to Galera tunnel, the highest point on the through line, although from here they have a branch running up to Morococha, a mining

camp 17,575 feet above sea level. This is the highest point in the world where men work. The richest copper ore in Peru is mined here, and the mine belongs to the Cerro de Pasco company.

At Galera tunnel, General Manager Feehan, Señor Pedro Larranaga, a director of the railway company, and myself, left Mr. Feehan's car and took a specially constructed hand car for the hundred-mile trip to Lima, every foot of which is down grade. There

A SUSPENSION BRIDGE, BUILT BY THE
INDIANS OF PERU.

were two brakes on the car, one handled by Mr. Feehan, the other by Señor Larranaga, and the carefulness with which they watched every foot of the road convinced me of the danger of traveling twenty-five miles an hour or more down grade on a light car.

The beauty of the scenery, the ruggedness of the high

mountains, the deep ravines, with rivers sometimes 2,000 feet below, the sixty tunnels we rushed through, the curves, reverse curves, switchbacks, the mining camps, smelters, villages, bridges, waterfalls, peons, were like objects in some strange journey in a dream. On and on we rushed, only stopping at a switchback to turn over our seats and face the other way, and the seemingly sheer madness of the experience will survive in my memory should I live a thousand years. Here they slow up long enough for us to look down through a bridge, where, in a river four hundred feet below, lies part of a bridge, an engine and fourteen cars that "got away." That is the only explanation of the accident that cost a number of lives. Again we pass a spot where they cut a tunnel for the river and appropriated the bed of the stream for the railroad. Again we are running around a curve on a big rock sticking out over the river so far that the water is directly under us and cannot be seen. There is not and never will be another railroad like this. I am proud of my American fellow man, exile though he may have been, who planned and put it through. I have sailed in the air, been on a burning ship at sea, hunted grizzly bears in the Rockies, lions and elephants in Africa, and have been on the firing line in battle, but I never before experienced all the sensations possible to those past perils at one and the same time.

With the railroads of Peru in the hands of a corporation such as now owns them, and which employs talented men to care for, protect and extend them, it seems to me that this country made a very fine bargain when it got rid of its national debt and secured good transportation at the same time.

Before the war with Chile, as I have mentioned, Peru was very rich in both nitrate and guano, both of which are unequalled fertilizers. Chile took the nitrate, which will be worked out, some day, but as long as the birds live there will be guano on the islands the birds inhabit. Recently the Peruvian Corporation, which owns half of the islands, has protected the birds in nesting and fledgling time by inaugurating a closed season of several months, during which no guano is removed and no persons are allowed on the islands.

It was formerly supposed that the seals dropped guano on the land, but this has been disproved, and as the seals only eat

the eggs and disturb the young birds, as well as catch the fish that the birds live on, the company is now exterminating them. These seals are not fur-bearing, but their hides are good for leather and some oil is saved from the carcasses. The Government, by pursuing the same wise policy, can greatly increase the quality and quantity of the guano deposits, and thus offset the loss of its nitrate fields. The net revenue derived from guano by the Government and the Peruvian Corporation combined is about \$1,500,000 annually.

When I first saw the barren desert coast of Peru I was disappointed, but now that I appreciate how the snows deposited on the high mountains are continually melting under the tropical sun, forming rivers that reach the ocean underground, I am satisfied that sufficient water to supply artesian wells, with which much of the desert land can be irrigated, will be found

LLAMAS AT MOROCOCHA COPPER MINES, PERU. AS PACK
ANIMALS THEY CARRY JUST 100 POUNDS EACH.

when the wells are drilled. Confirmation of this theory is found in the many strong wells that have been developed within the last few years, and everything grows here abundantly where there is sufficient water.

Few people, perhaps, are aware of the fact that our own great chain of lakes—Superior, Michigan, Huron, Erie and Ontario—receive thirteen-sixteenths of their water from underground rivers, many of which rise in the Rocky Mountains. Only a few of these subterranean streams are from the Canadian side, and that is why the United States is really entitled to more than one-half of the water in the Great Lakes, and why the city of Chicago is entitled to draw water from Lake Michigan and send it down to the Gulf of Mexico, instead of all the water following the course of ages over the Niagara Falls.

Depending on irrigation, sugar and cotton are limited in area in Peru, but are very profitable crops. The cotton is yellow and grows on bushes like trees that bear for seven years without replanting. These small trees produce as fine a grade of cotton as the famous "Sea Island," and it is often used for wool by manufacturers. Recently an American scientist found, on a small cotton plantation, over on the Inambari River, the parasite the world has been looking for to destroy the insect that has been injuring the cotton plants of the United States.

Nothing grows better in Peru, where water is found at the proper elevation, than sugar-cane. The sugar plantations are immensely profitable, with any kind of decent care, as the cane grows the year around, and a small mill can work almost continuously, while in the southern part of the United States and Cuba the cane mills must have capacity sufficient to take care of a whole year's crop in sixty days.

The oil fields of Peru that have been developed produce a supply greater than the home market consumes. The fields are owned by English capitalists, and the operators export to California the oil and refine it into benzine and gasoline, using the fuel oils in Peru. The California oil will not make gasoline or benzine, and how nice and convenient it is for us to supply, free of duty, that territory from Peru by water freight!

CHAPTER VII.

THE ANCIENT INCA CAPITAL.

MODERN Cuzco is a study in the passing of the old and the coming of the new. Only in 1909 the railroad reached this city, and everything is now changing rapidly. A horse tram has been built to connect with the railroad station, a

mile from the center of the city, which is built on the side of a mountain. One of the most objectionable features of the city, because it is forced upon the notice everywhere one goes, is the open sewers, and though they are filled with running water, they constitute a nuisance which can be abated only when they are put underground. This, we were assured, was in contemplation. Within twenty miles of the city there is an abundant water power which will soon be transmitted by electricity to Cuzco for lighting purposes. Then this ancient capital of the Sun Worshipers will no doubt enter a new era.

In the old days, before the Spanish conquerors came, the Incas had one immense park in the center of the city, but

ANCIENT WATER FOUNTAIN,
CUZCO, PERU.

the Viceroy of Spain cut this park into three plazas and built houses in between and around them, and while this spoiled the great park, it utilized the space to better advantage, for at this altitude, 10,500 feet above sea level, no one cares to walk about more than is necessary.

The province of Cuzco has a population of about 400,000 and is one of the chief political divisions of the Republic of Peru. The city of Cuzco lies at the junction of three rivers. It is six hundred and forty-three miles from Lima, and five hundred and eight miles from Mollendo, the only port reached by railroad. The city, owing to its commanding position, is destined to become a great distributing center for the country to the north, east and west. To the north and east lies the great tropical and semi-tropical country, and in all directions there is a fertile grazing and agricultural country. In addition to these there are many rich mines which, with the coming of steam transportation, will be developed.

The greatest copper discovery of the age is the Ferrobomba mines, forty miles northwest of Cuzco, where, it is said, there is a solid mountain of copper ore in sight. These mines can be worked at an altitude of 13,000 feet, while the Cerro de Pasco mines are worked at 14,500 feet. Ferrobomba district has been but slightly developed, it being necessary to await the extension of the railroad. These wonderful

GROUPS OF NATIVE INDIANS IN REGION OF CUZCO, PERU.

BIRD'S-EYE VIEW OF CUZCO,

While the moneyed people of the United States are gradually acquiring many of the "good things" in South America, they for the most part buy second-hand, and have done little original prospecting or promoting on their own account.

The private residences, offices, agencies and banks of Cuzco open onto beautiful *patios*, or courtyards, banked with flowers. Only shops open onto the streets. Common labor, by Indians, is very cheap, about thirty cents a day. Drunkenness among the common people seems to be the curse of the country. They make a vile home-brewed beer of anything that will rot and ferment, and of this they imbibe large quantities, with the usual disastrous results.

The Prefect invited us to review the soldiers stationed in Cuzco, a force numbering five hundred and fifty men and officers, and we accepted the invitation. Leading the column was a band of twenty-five pieces, which played as well as any military band that I have ever heard. Following the band came a

THE OLD INCA CAPITAL OF PERU.

squadron of cavalry well mounted and equipped, and following the cavalry was a battalion of infantry composed of sturdy, well-drilled and serious-looking soldiers. Behind them was a battery of mountain artillery, small rapid-fire Maxim guns being mounted on mules. In times of war or revolution these batteries are the most efficient branch of the army, being able to get over the rough country and intervening mountains at a rapid pace. The soldiers wore clean, bright-looking uniforms, consisting of a blue cap and blouse, and short red trousers, the calf of the leg being covered with dark blue *puttees*.

After reviewing the soldiers, we went with the Prefect to the market place in the Plaza San Sebastian. The Indian market women sit under little canvas tents, their wares in front of them, arranged in small piles, and they carry their goods to market on the backs of llamas or burros, if they are fortunate enough to own one. The market prices are more reasonable in Cuzco than in most other places in Peru. Lamb is sold for 5

PREFECT AND SOME LEADING CITIZENS OF CUZCO, PERU.

cents a pound; beef for 8 cents; chicken for 12½ cents; eggs for 12 cents a dozen; potatoes for 2 cents a pound, and a dozen ears of fine sweet corn for 10 cents. Other articles of food are sold at equally reasonable prices. Speaking of things to eat, few people know that our first Irish potato was brought to Europe from near Cuzco. I secured two very rare Indian hand-woven vicuña *ponchos*, from which I will have a shooting suit made that I fancy will last me through the balance of my life. This cloth is very light, warm and waterproof.

Every one puts on his "best bib and tucker" in Cuzco on Sunday. The stores close at ten in the morning and the city gives itself over to church-going and simple amusements. The parks are gay with people, and the air is thrilled at times by sounds from the deep-toned bell in the steeple of the massive stone cathedral on the Plaza de Armas. This great sonorous bell is famous throughout Peru, and is called the Maria Angela, its composition being largely of gold. It took ninety years to

complete the cathedral and it unquestionably is a magnificent structure. The interior is divided by stately stone pillars into three naves or sections. In the central nave is the choir and in front of it stands the high altar, covered with silver. In the Inca times the altars erected to the Sun were covered with gold, but the looting Spaniards carried most of that away and gave it over to baser uses.

There are many churches and convents in Cuzco, built by the Spaniards after their conquest of the Incas, some of them being erected on the foundation of the walls of the Inca temple, while several of the old convents are used as shops by the merchants of Cuzco. The church of La Merced is built on the foundations of an ancient Inca temple which was dedicated to the worship of the Sun. The interior of this church is large, with great stairways of black granite running to the galleries above. The convent of Santo Domingo is built on the founda-

SHOPS IN CORRIDOR OF PLAZA, CUZCO, PERU.

tion walls of the Ceoricaucha, the richest of the Inca temples of worship, and a Christian altar occupies the very place where the Incas' sacred emblems to the Sun God were guarded by their high priests. The cells for the nuns in the convent of Santa Catalina are identically the same as those occupied by the Virgins of the Sun.

In this there is something both poetical and fitting, since the spiritual conceptions of all peoples, when analyzed, are found to be essentially the same—adoration of the felt but unseen intelligence that dominates the life of the universe. The ancient Incas felt and saw that Mighty Something in the dazzling splendor of the Sun, the nuns of Santa Catalina look upon the crucifix and through that symbol of God's love mentally conceive of the God that rules the Sun itself. In essence the prayers and adoration of both were probably much the same.

Ancient Cuzco was the capital and treasure city of the Incas. The tribes under their dominion paid tribute, bringing

great stores of gold and precious stones into the city. It held at that time, no doubt, the greatest store of treasure of any city in the world. When the Spaniards conquered the Incas they acquired over \$100,000,000 of gold alone, besides the other valuable treasures of the Inca temples in Cuzco. One fairly gasps at thought of this monumental loot. Every street and alley in Cuzco today tells the story of the power and progress of the Inca empire, the old walls of Incaic architecture forming the basis of many of the later buildings.

The Prefect of Cuzco arranged that my party should have horses belonging to the cavalry squadron, and accompanied by a guard of soldiers, with Indians carrying our cameras and kodaks, we climbed the mountain, on whose summit, seven hundred and forty feet above the city, are the ruins of the Inca fortress of Sacsahuaman. The ascent is so steep in places that steps have been cut to insure a safe footing. On the way to the summit we passed the ancient palace of the Inca Pachacu-

tecs, and a little beyond the High Priests' Temple of the Sun. Near the temple ruins is the house once occupied by an Inca medicine man, its walls showing today seven serpents carved in relief on the façade. There is no explanation of how the massive stones were brought here to construct these buildings, but it would be interesting to know, for one stone that I measured on the fortress of Sacsahuaman was thirty-two feet by twelve feet and very thick.

The theosophical cult, I understand, claim to have received from the Mystics of India a curious explanation of how this seemingly impossible feat was accomplished. The Mystics say that the people of Egypt, who built the Pyramids, and these ancient Incas knew the secret of levitation; that is to say, knew how to suspend the law of gravitation. The ancient Egyptians, they assert, and the ancient Incas derived this secret from the Atlantean Mystics, both the Egyptians and Incas having sprung, in remote prehistoric times, from that long-sunken

RUINED ENTRANCE TO THE INCA FORTRESS WHERE PIZARRO'S
BROTHER WAS KILLED, NEAR CUZCO, PERU.

ANCIENT INCA FOUNDATION WALL IN CUZCO, PERU. THOUGH
LARGE AND IRREGULAR IN SHAPE THE STONES ARE FITTED
TOGETHER SO PERFECTLY A KNIFE-BLADE CANNOT
BE INSERTED BETWEEN THEM

continent. The theory is interesting mainly because it is fantastic, for we cannot prove or disprove it.

Near the fortress is a level plot on which Cuzco's modern society dances every clear Sunday afternoon. Near by are the Rodederos, great natural rocks, worn away at intervals to a depth of six inches. It was here the Incas used to have sliding races, the one first reaching the bottom receiving a pot of gold.

Like all strong nations who feel too secure in their power and wealth, the Incas became lazy and unambitious, so the historians say, and hence were easily conquered by the Spaniards. The real explanation, however, of their downfall was

A SMALL SECTION OF THE RUINS OF THE INCA FORTRESS,
CUZCO, PERU.

PORTION OF INCA FORTRESS OF OLLANTAYTAMBO, NEAR
CUZCO, PERU.

probably the fact that the Spaniards used the terrific force of gunpowder with which to destroy them. Had the Incas known the secret of gunpowder as well as they did some other useful secrets, of which we are ignorant, no doubt history would record a different story.

In Cuzco today are evidences of the grandeur in which the Spanish Viceroy lived. One of the leading merchants of Cuzco lives in the old palace of the Marquis Villambrosa, the first Viceroy. It is an extensive building with many rooms, surrounding a large *patio*, in which today are two old state coaches whose panels still retain the coat of arms of the Villambrosas. These coaches were drawn by four white Andalusian mules, and were used by the Viceroy and his family when they traveled.

In Inca times Cuzco had a population of 200,000; today it has a population of 20,000; but with the advent of the railway Cuzco has experienced a mild "boom," and in ten years should have a population of 50,000.

The ruins of Ollantaytambo, north of Cuzco, are most interesting. Here the sovereigns of ancient Cuzco had their favorite summer residences. The ruins consist of a fortress built on the top of a precipice one thousand feet high, commanding a gorge through which the Urubamba River runs to the Convencion Valley, in the wild regions of the Amazon. The fortress is built of immense blocks of stone placed around

TYPE OF INDIANS WHO CHEW COCA LEAVES, FROM WHICH
COCAINE IS MADE, PERU.

MR. GULICK, SECRETARY TO MR. BOYCE, SEATED ON A GREAT STONE
CALLED THE "INCA THRONE," NEAR CUZCO, PERU.

A HARNESS SHOP IN ARCADE OF PLAZA, CUZCO, PERU.

the ridge of the precipice, and one reaches the fortress by a winding stairway cut in the solid rock. Near the top of this stairway is a grotto known as the "Seat of the Inca's Daughter." In the center of the grotto is an altar six feet square, cut out of solid stone, where the Inca high priests performed the religious rites, it is said, with accompanying human sacrifice, before the Emperor and his court and the people, assembled on the plains below. If the ancient Incas performed human sacrifice, they seem in that respect to have entertained a reverence for the Creator as terribly profound as that of the ancient Druids of England. We can see today the grooves on the altar leading into the basin, where, it is believed, the blood of the sacrifice was received.

Facing the "Seat of the Inca's Daughter," on the opposite side of the plain, is another cliff, and in the face of it is a

series of ledges with numerous small caves along each one. These were used for political prisoners who, when condemned to death, were let over the top of the precipice above by ropes, put into one of the cells and left to die of starvation and thirst. Ordinary criminals, so tradition says, were just thrown from the top of the cliff.

The governmental system of the ancient Incas seems to have been something like a pure Socialism, dictated by an absolute monarchy, a most curious combination. In reverence for their rulers, and in the subordination of themselves to the uses and purposes of the State, they were not unlike the Japanese; in their unification and absolute personal guidance by laws that were both civil and religious at the same time, their social structure was analogous to that of the ancient Hebrews. However austere and faulty, to our own way of thinking, may have been their system of life, it apparently con-

tained enough virtue to lift them from barbarism and make them finally one of the greatest and most amazing ancient nations of which we have historical knowledge.

NATIVE INDIANS SEATED ON THE STEPS OF AN INCA RUIN.

CHAPTER VIII.

HEADWATERS OF THE AMAZON.

A MANUFACTURER of witticisms has said that a woman seldom pays much attention to what her husband says unless he is talking in his sleep. The obvious inference drawn from his "gem" is that a wife is most interested when a husband is likely to divulge his secrets. Readers, too, I have observed, are most interested when a writer is most frank. Hence I will confess that contemplation of our intended investigation of the savage tribes of the regions about the upper sources of the Amazon River was slightly disturbing. Prospective contact with poisoned Indian arrows, association with head hunters and beings that eat human flesh—if given a chance—are apt to overexcite the imagination. Thus our party took the trail toward the headwaters of the Amazon with some misgiving.

INDIAN MAIDEN FROM THE AMAZON HEADWATERS.

Fifty-three tribes of Indians, speaking different dialects, inhabit the country about the affluent rivers of the Amazon headwaters. The real source of this king of rivers is in the higher Andes region of Peru, the river's fountain head being a lake about three miles across, called the Lauri Cocha. At first a little stream, it descends the mountain slopes of the

A GROUP OF CHUNCHIO INDIANS, PERENE RIVER, PERU.

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Peruvian Andes, and leaving them, penetrates South America eastward, flowing into the Atlantic 3,700 miles away. Many of the rivers flowing into the Amazon are dangerous to travel, as the banks and country on both sides are inhabited by Indians, some of whom are cannibals, and all of whom resent the entrance of the white man into their territories.

Traveling by primitive methods that have endured in this region for centuries, we set out for the upper Amazon country, from the "roof of the world." Furnished with mules both as pack animals and for riding, we started along the eastern trail toward the land of the Chunchos and the Campos Indians. It was a hard twenty-five-mile ride over a rough mountain trail from Oroya to Tarma, our first stopping place. Here we found the descendants of some of the first Spanish families who came to Peru. We stopped at a hotel called "The Grand Hotel of Europe"—dirty, smelling of onions, the beds with wooden slats, the food greasy and full of garlic. But, oh, grandeur! staring at us from every direction were large mirrors, there being twelve in my two rooms! How many there were throughout this "Grand Hotel," we did not remain long enough to ascertain.

From Tarma we rode for a day through an uncultivated country to Huacapistana, where we ate and slept in a so-called hotel, then were off the next morning at five o'clock for La Merced, which we reached in the late afternoon and found ourselves in the hot, tropical climate of the Chanchamayo River. We now were at the end of the Government telegraph lines, we bade *adios* to the last hope of communication with actual civilization for some days to follow.

The constant jog, jog, jog of our mules became very tiresome, and we were glad in two days to reach the Perene Colony, which is an estate of a million and a quarter acres owned by the Peruvian Corporation. Here we found ourselves comfortably housed and fed, and it was exceedingly good to have a rest. On this big plantation they grow rubber and coffee and we had our first look at the Chuncho Indians on Sunday when they came into the colony store to trade. The Chunchos are all civilized to the point where they have lost their savagery, though they carry their bows and poisoned

A ROCKY ROAD LEADING TOWARD THE PERENE COLONY PERU.

arrows, paint their faces, wear almost no clothing and live in bamboo huts plastered with mud. They are a shiftless, worthless lot, entirely devoid of ambition, and live dirty, immoral lives. They have no traditions, few customs, and speak a mongrel dialect.

Beyond the Perene Colony lies that vast part of South America known as the headwaters of the Amazon, and the great Amazonian valley, which is one of the big things of the universe. Leaving the last plantation of the Perene Colony, we loaded our baggage, supplies and selves onto native *balsas* (nothing but a few bamboo poles tied together with tough vines) and started down the Perene River. We were in the heart of the *montaña* (highland) country and among the Campos Indians, who retain many of their savage traits, and we were advised not to be startled if an occasional arrow should whiz by our heads. One of their customs is to torture the women or widows of all their dead warriors, or sell them to another tribe. In other words, the female does not count much with the Campos. The photographs we took will give the reader a clearer idea of how these Indians dress and live than

NATIVE TRANSPORTATION ON THE PERENE RIVER, PERU.

I can picture in words. At night we got our tents, hammocks and mosquito nets, and taking turns at keeping guard, slept as well as conditions would permit.

In no country can be found a more fertile land, and nowhere have we seen such a variety of fruit, or more luxuriant vegetation. Wheat, maize, rice, sugar-cane, cacao, coffee, potatoes and cocoa abound, and we found the silkworm flourishing. The only need of this region is colonists and burro roads, and the Government is doing all in its power to secure them.

We returned to Yapaz from our little trip down the Perene River and were presently again astride our sure-footed mules and had six days of hard riding to Puerto Yessup on the Pichis River. During these days we had not seen a house or a sign of a white man's habitation, and had only the Indians, monkeys, parrots, wonderfully colored butterflies and fleas for company.

When it comes to eating, South America has some very odd dishes, which, however, when well cooked, will satisfy hungry men. In Africa I ate giraffe-tail soup, rhino tongue and ostrich eggs all at one meal, but it remained for our Indian cook in this tropical forest country to furnish parrot potpie and monkey stew. Personally, I preferred only the monkey's brains, which are quite good when fried, and look and taste more like sweetbreads than brains. The monkeys are very plentiful and it is no trouble to shoot all of them that you want. They jump from limb to limb and tree to tree, catching hold mostly by their tails. Next to the brains the hands of the monkey are the most palatable. The black monkey, called "Sambo," stands about two feet high, but is not considered as great a delicacy as the red monkey, which is about six inches shorter and has a larger head. The red monkey also has a pouch under his chin through which he can give out a peculiar sound. This pouch is regarded as a tidbit by the natives. There are numerous smaller monkeys, but we did not find them any finer food.

Parrots make good potpie, but it is necessary to stew them from eight to twelve hours to make them tender. Mixed with rice and dried fruit, after being thoroughly cooked, then allowed to cool, to be warmed up for breakfast, one has a foundation for a hard day's work. In this region all game and fish

INDIAN TYPES OF THE AMAZON HEADWATERS.

must be cooked within a few hours after it is taken or it will spoil. Nothing will last from evening to morning unless it has been "fired." We found plenty of little red deer that would dress about fifty pounds, but as there is little or no grass and they browse on leaves, the meat is not very palatable. The monkeys and parrots feed more on nuts and seeds, hence the flesh is better.

The tapir, a waterhog about the size of a small Jersey cow, and with a hide as tough as a young rhinoceros, is fine food. Drovers of *pecarri*, or small wild hogs, were plentiful, and are considered rather dangerous when in big packs. They have in one spot on their backs a bunch of bristles at the root of which is a deposit that must be cut away as soon as the animal is killed or the meat will become so tainted that it cannot be eaten. There is a large variety of game birds to live on if the traveler can take the time to hunt them. Only on portages around the rapids did I pay any attention to them, and then only as we ran across them. The largest of these game birds

A PECCARY, THE WILD HOG OF SOUTH
AMERICA.

is about the size and shape of a four-months-old turkey, but is jet black. Its meat is very white and palatable, if not too old, when it is as tough as old parrot and requires a whole day's boiling. The grouse are different from our ruffed or pin-tailed kind, not being so large, while their feathers are nearly black and white.

Another delicacy is doves' eggs, which are found deposited in the sand on the banks of streams. The doves do not "set" on their eggs, but let the sun hatch them out. The eggs do not have a shell like our birds' eggs, but a tough film like a snake egg. Canned goods spoil so quickly under the tropical sun, and our Indian guides ate so much, that game of all kinds came in very opportunely, especially as the Indians understood very well how to prepare the different species we shot. We could have had any quantity of tropical fruit, but had to be very careful about eating it on account of the health of our party. We always boiled our water and only once did we have any fever.

We found canoes at Puerto Yessup in which we went to Puerto Bermudez. From there we took a boat to Masisca on the Pachitea. On the left-hand bank of this river live the

Cashibos Indians, one of three cannibal tribes of Peru, and they are the most degenerate of all the Indians of South America. We found a Chinaman in a canoe, who came out to our boat. He is the only outsider or foreigner the Cashibos have allowed to live in their territory, and when we offered him salt he refused and we concluded he must have become a cannibal, too (cannibals eat no salt), although he did not refuse to eat the meat and potatoes we offered him. The Cashibos wear no clothes, shave their heads and make war on all other tribes.

My man-servant, Charlie, is half South American Indian and half West Indian Negro, and speaks English, Spanish, French and most of the South American Indian dialects, and in our frequent meetings with savages he was invaluable in explaining that we were on a peaceful journey. Charlie carried night and day a *machete* (big knife) and he knew how to use it, too. He had been living five years in Chicago before he came with me. The reader can make his own deductions.

Reaching Masisca we were only a few days' journey from Iquitos, where the Ucayali and Marañon Rivers come together and form the Amazon proper. While in Masisca we ate some flesh of the cowfish, which is agreeable to the palate, the flavor being between that of beef and pork. The cowfish has a smooth body with a few scattered hairs and is of a lead color. The head is not large, but terminates in a large mouth with fleshy lips resembling a cow's. Behind the head are two powerful oval fins, and just beneath them are the breasts from which, if pressure is applied, flows a stream of beautiful white milk. The cowfish is about seven feet long, and its forward fins are highly developed, resembling the human arm, and having devel-

HEAD-HUNTER INDIANS OF THE UPPER AMAZON. THE ONE WITH HIGH HAT IS A WITCH DOCTOR.

opments somewhat resembling the human fingers. These animal-fish feed on grass along the banks of rivers and the margins of lakes.

We left Masisca in dugouts on the Alto Ucayali River, well outfitted and equipped, with our friendly Indian guides and paddlers all smiles as a result of the presents we had given them. The Alto Ucayali is a sluggish stream, its banks covered with heavy tropical vegetation. We found some of the women and children of the cannibal Cashibos living in this region, having been sold to the Campos, Piros and Conibos tribes, which inhabit the territory along the Ucayali River. The Cashibos explain their cannibal customs by saying that they eat the white man in order that they may absorb some of his qualities into their yellow bodies. All along the Upper Ucayali we found immense rubber forests and trees of the *cinchona* bark, the well-known Peruvian bark used in the manufacture of quinine. We enjoyed a good treat here, our first really palatable food in several days, for our Indians brought in some frogs that were from twenty-four to thirty-six inches long and weighing from two to three pounds each. These they skinned and cooked, not only the hind legs, as we do, but the whole frog, and the flesh tasted as sweet and tender as the best young spring chicken. After four days of travel toward the source of the Upper Ucayali we made our camp on the banks of the river near a small Indian village of the Conibos, and sent Charlie ahead with presents for the chief and his wives, and to see if the inhabitants were friendly. Charlie returned with messages of friendship and presents of fruit and an invitation for our party to visit the village, which we gladly accepted. The Conibos have the curious custom of tying their wrists and ankles tightly with thongs to increase, as they claim, their nerve force. The little village had about one hundred inhabitants, the men being employed on the big rubber plantations, when they were paid in advance. Experience has taught them this, for many times the owners of the rubber plantations have failed to pay the poor Indian his wages, and it is little wonder they are suspicious of, and often treacherous, in their treatment of the white man.

We were received in style by the head man of the village

in his bamboo hut. He wore only a bright-colored cloth around his loins, and on his head a headdress made from the feathers of many-colored birds. Sitting on the floor behind him were his three wives, who handed us at his command coca leaves, which we were invited to chew. All the Indians of the Amazon country chew the coca leaf with as much pleasure as some Americans chew tobacco. The coca leaf really has the same effect as a drug, as it deadens the Indian's intellect, but at the same time increases his capacity of endurance and strength. Cocaine is made from such leaves as these people are in the habit of chewing.

A dance was arranged at night for us, and the Indian men, nearly naked, with their bodies and faces painted with different colors, danced for nearly an hour to the beat of a curious sort of drum made from the skins of animals.

We continued on our journey in five dugouts manned by twenty Indians—strong, lusty fellows, who kept up a low humming sort of song throughout the day. The days did not change much for us, the scenery being the same, and the journey grew very monotonous. It was really a relief when we had to make a portage, carrying our dugouts and outfit overland to escape some impassable rapid or cataract. We were all more or less bitten by mosquitoes and insects, and my man, Charlie, looked as if he had the mumps. When we had made our camp in the evenings we set our lines for fish, and it was seldom we did not have a good mess of the finny fellows for supper, which we heartily enjoyed.

Upon our journey into the headwater region of the Amazon, we were extremely glad to meet a white man—Professor Taylor of Harvard University, who had lived among and studied the habits and lives of the Jivaros tribe—the head-hunting Indians, who live along the Bobonaza and Morona Rivers, tributaries of the Amazon, which extend into Ecuador. It was our intention to explore those rivers, but finding we could get reliable information from Professor Taylor we concluded to abandon this hazardous trip and will give the reader a synopsis of Professor Taylor's experience and deductions.

Professor Taylor had explored those rivers twice; the first time with one white companion, when neither knew the lan-

TWO GROUPS OF JIVAROS INDIANS NATIVE TO THE AMAZON RIVER HEADWATERS, PERU.

guage or customs, and as a result his white companion was shot from the banks of the Bobonaza River by a poisoned arrow and died.

The Jivaros tribe resents the entrance of white men into their country, and on Professor Taylor's second trip to study them it was fortunate that he had acquired their dialect, and was able to cure a chief's son of a fever, or doubtless he would never have got out alive. The Jivaros people are the only head-hunting Indians of South America. Of their peculiar and horrible practice of curing and preserving the heads of the enemies they kill, I gave an account in my chapter on Ecuador. The Jivaros live in a constant state of warfare among themselves. They are not content with tribal struggles, but families wage war against families. These family wars are brought on by the *broughas* (witch doctors). When any one is sick they send for the witch doctor, and if he can cure the patient with his herbs, all very well. But if the patient has some sickness he is unable to cure, the witch doctor swears a member of some family, naming the family, has put a *chanute* (curse) on the victim, whereupon the victim's family swear vengeance against the family of the person who has put on the curse and make a midnight assault on their enemy's house, taking as many heads as they can get, thus creating a feud and warfare between the two families, which is taken up by all their relations and continued sometimes for years.

These Indians are the most vigorous of all the South American tribes. The men have three or four wives, some of whom have been won in combat. The older women, males and male infants captured in battle, have their heads cut off, while the young girls, from twelve to fifteen years of age, are kept as wives by the victors, and the female children are kept until they are of marriageable age. Jivaros women are sometimes very pretty, they wear only a loin cloth, and the men are very jealous of them.

The world is interested in the opening up of water and rail routes connecting the Amazon and the Pacific Ocean. The Peruvian Corporation promised the Government when it took over the State railroads that it would furnish an outlet to the

PICTURESQUE SAN RAMON, PERU.

Amazon under certain conditions. Thus far this corporation has made surveys from Oroya to Tarma only.

The Cerro de Pasco Railroad Company, controlled by the Cerro de Pasco Mining Company, has made surveys and estimates of the cost of a road from its line to the navigable headwaters of the Amazon. The Peruvian Government has agreed to pay the interest on bonds, in addition to conceding a large land grant, in order to have the road speedily constructed. It is commonly believed this will be the first company to furnish connection between the Amazon waters and the present rail head.

A corporation backed by the great Krupp Gun Manufacturing Company, of Germany, has also made a survey near the northern boundary of Peru, from a fine harbor on the Pacific coast to the navigable tributaries of the Amazon. For making the survey and report, which were carefully prepared, the Peruvian Government gave the corporation a very valuable mining concession. Without question the three corporations that have made surveys are financially able to construct lines of railroad, and within ten years we will doubtless be able to sail up the Amazon to its headwaters, and cross over the Andes by rail and down to the Pacific Ocean, a distance of about four thousand five hundred miles, or make the journey *vice versa*. Probably it would be twenty years before such a road would pay, and at present there are no good commercial or traffic reasons for the road, but the Peruvian Government considers it necessary for the development of the country, and their attitude is entirely justified by the conditions.

CHAPTER IX.

JOURNEYS IN SOUTHERN PERU.

FROM Cuzco to Arequipa, Peru, about five hundred miles, there are a number of towns of some importance, and the people and buildings are such as are characteristic of this unique country. The market square, cathedrals and churches looked much alike, and varied in proportion to the population and importance of the cities I passed through.

The Peru Southern Railway is under the capable management of Mr. H. A. McCulloch, native of our own Lone Star State, and a past master in the business of managing railroads. When Mr. W. L. Morkill took the presidency of the Peruvian Corporation, which owns all the railroads of Peru, he was located in the City of Mexico, where he had been residing for many years. Two days after his arrival in Lima he cabled to Mexico for Mr. McCulloch. That was four years ago. The six hundred miles of Southern Peruvian Railroad was at that time being operated at a loss, the cost of operation alone being ninety-two cents on each dollar of receipts. Such reforms

were inaugurated that in 1910 the road was operated at fifty-two cents on the dollar, leaving a handsome dividend for the stockholders. Freight and passenger rates are about the same as in the United States. The roadbed is splendidly kept up, the rolling stock is in good condition, the employés are loyal and satisfied, and the trains run on time. It pays to employ trained, scientific managers, you observe.

The "branch lines" of the railroad are the llama and burro pack trains. It requires two hundred llamas or one hundred and fifty burros to carry one carload of freight into the interior, and from every station one may see the "branch lines" depart for their destination in the mountains, a most novel and picturesque spectacle. There are some big mules in this Peruvian country that can carry from two hundred to three hundred pounds, the heaviest piece of freight possible to pack being six hundred pounds, the article being slung between a pair of mules which are changed every two hours. This is unique "railroading," but it pays and is effective.

Between the high mountain ranges are fertile valleys where grass is grown and cattle, sheep, alpacas and llamas are raised. Sugar-cane is grown near Cuzco at an elevation of 8,500 feet. When the Incas occupied this territory the population was about ten times what it now is. No doubt, with time, the present population will be greatly increased. The mass of the people seem to be contented, and it is quite evident that they are happy after their fashion, the majority of them being barefooted, dirty and obviously healthy.

At Sicuani our train stopped for the night. Owing to a recent small revolution in this region there was an execution to take place at Sicuani early the next morning, and the natives were greatly excited. For some reason our identity was misunderstood and an angry crowd gathered around our private car, which we did not leave. The conductor wished to put our car in the train-shed with the engine and other cars, but I objected, remembering the disastrous fate of the Pennsylvania militia at the time of a certain labor strike in Pittsburgh, so our car was left outside, and we loaded our revolvers.

During the night the cook on the car, whose curiosity was greater than his caution, went out. We did not hear him

PHOTOGRAPH OF AN EXECUTION AT SICUANI, PERU.
(White cross indicates the prisoner.)

MINES OF LA FUNDICION, PERU.

going, but awakened as his foot touched the step of the car on his return. As the door opened he was covered with two guns, but our "boy" Charlie stopped further belligerent moves by yelling, "It's the cook!" It wasn't exactly pleasant to fancy what might have happened. All night long a band played funeral music, and early next morning we witnessed the execution. It was a depressing occurrence and we were glad when the train pulled out.

Quitting the train at Tirapata, at an elevation of about 13,000 feet, we traveled over the Inca Mining Company's wagon road, passing the night at Ceatac, a station of the mining company at the foot of an extinct volcano, which is reputed to be 22,000 feet high. After passing what is known as Acopampa Bridge, flowers, shrubs and vegetation in general began, and from there to the Inambari River the trip became a most enjoyable one. At Casahuri we found a coffee plantation belonging to the Inambari Para Rubber estate, at an elevation of about 4,500 feet above sea level. From there we proceeded to Port Seddon, which is the camp and shipping yard of the Inambari Gold Dredging Concessions, Limited, where operations were soon to begin. According to William Bach, who was sent out to examine and report on the Inambari River, prior to the formation of the gold company, the average dredgable values taken from surface pannings were over \$1.75 to the cubic yard. This company, which has three hundred miles of the river leased, was organized by Mr. George W.

Sessions, an old California miner, and it is believed that the company has one of the richest mining concessions in the entire world.

Placer or alluvial gold is found in small quantities in almost all the streams on the eastern slope of the Andes. These placer deposits are at present washed indifferently and in a crude manner by the Indians, who trade their gold to traveling merchants for cloth and other commodities. Another company, organized with British capital, will soon have several hydraulic giants in operation, by means of which powerful streams of water will be made to wash the gravel from its resting place in the high banks into sluice boxes where the gold will be caught on riffles and mercury. This company claims that they have millions of yards of gravel averaging forty cents gold per cubic yard. Much depends upon the results obtained by these two companies, and should success crown their efforts, which is justly due these pioneers, the future of Peru's placer gold mining industry will be assured, since there are many thousands of acres of ground that might be profitably worked by such methods.

While on the subject of mining, a glance at the industry in Peru may be appropriately introduced at this point. I investigated the subject with a practical mining engineer from Minne-

apolis, Minnesota, and the following mining data can be relied upon. In 1910 Peru produced 25,000 long tons of pure copper, valued at approximately \$7,300,000. Seventy-five per cent of this production may be credited to the Cerro de Pasco Mining Company. Backus and Johnson, operating a smelter at Casapalca, on the Peruvian Central Railway, provided 2,000 tons or about eight per cent of Peru's 1910 copper output, and the remaining seventeen per cent was derived from various small private smelting concerns throughout the republic, and from raw ores shipped directly to the United States and Europe for treatment.

All the ores treated in the country are smelted either in reverberatory or blast furnaces, the resultant product being metallic copper or matte. The former, technically known as "blister copper," is shipped to and refined electrolytically in New Jersey, when it is ready for the market in its purest form. The matte is a sulphide of iron and copper and is usually shipped and sold as such in the United States, where it is again melted and subjected to a process known as "converting," the product being "blister copper" which is treated as above described. Any precious metals contained in the "blister copper" or "matte" are recovered separately and treated by a special process

THE MULE MARKET, HUANCAYO, PERU.

As most of the known copper deposits of Peru are situated in the mountains and long distances from the coast, the development of that branch of the mining industry depends upon the building of railroads. Labor is exceedingly cheap, a native Indian miner receiving fifty cents per day, and considering the price, his work is fairly efficient. Climatic conditions in the extreme high altitudes are generally severe, but foreigners, providing they do not play alcohol against nature, withstand the conditions admirably, once they are acclimated.

After all, the romance of Peru is "silver." Silver it was that the first Spaniards and Portuguese mined, over two hundred years ago, and it was silver that tempted those bold English pirates, who followed like hawks the Spanish galleons loaded with the precious metal, and finally, too much silver from Peru was probably the real cause of Spain's decadence. In those old days, before Peru was a republic, there existed a law requiring all miners to deliver, free of expense, a fifth of their product to the crown. This was known as the *Quinta*

del Rey, and many are the tales of "graft" that is said to have been perpetrated by the royal agents when those untold millions were shipped to the mother country.

However, today, the silver industry is but a specter of what it was in the times of the early Viceroy, and the present annual production is but a small fraction of that obtained two hundred years ago. The Cerro de Pasco Company's ore contains some silver, for this district was the most noted producer of the metal in Peru, and in 1910 this country, due to their smelting operations, contributed 2,300,000 ounces with a value of \$1,150,000.

The few small, scattering mines in the republic, operating solely for silver, usually employ what is known as the lixiviating or hypo-sulphite process. Sulphide or refractory ores are first roasted with salt in reverberatory furnaces, fired with the guano or excrement of the llama (an ideal and generally the only available fuel in the barren mountains), which converts the silver in the ore into a soluble chloride. Thence the ore is treated in small wooden or stone tanks with liquid hypo-sulphite of soda, and when the solution of the silver is com-

plete, it is precipitated as silver sulphide, and either shipped as such to European refineries or melted directly into silver bars.

A small quantity of raw, high-grade silver ore is exported annually, but as the ore-bearing veins are usually extremely narrow and the properties far from railways, the profit derived is small.

While Peru has been, essentially, a silver and copper country I have found very little evidence of her importance as a gold producer. Some historians even claim that the vast golden treasures of the Incas, known to have been in existence in Cajamarca and Cuzco, and much of which fell into the hands of the Spanish conquerors, came from Colombia, which has always been noted as a gold country.

In truth, there is not one company of note in Peru now producing gold. The Cerro de Pasco Company (an exception) contributed almost the entire output for 1910, about 11,500 ounces valued at \$230,000, and this was practically produced as a by-product.

The "Santo Domingo," a quartz mine, equipped with a stamp mill and cyanide plant in the Sandia district, though controlled by American capital, and which has produced several million dollars of gold, was lying idle. But in the same district the "Montebello," a native company, was developing several promising veins from which beautiful specimens of native gold have been taken and the company is contemplating the erection of a stamp mill.

Arequipa, with 60,000 inhabitants, is the second city of importance in Peru. It lies in a fertile valley one hundred and seven miles from the coast and is the headquarters of the Southern Railway of Peru, the railroad shops, in which five hundred men are employed, being located there. Northeast of the city is beautiful Mt. Misti, towering skyward 20,000 feet, snow capping its top with gleaming white throughout the entire year. Harvard University has astronomical and meteorological observatories near Arequipa, the meteorological station being the highest in the world—16,280 feet above sea level, or 2,000 feet higher than Pike's Peak. Tramways connect different parts of the city, which is lighted by electricity and has a good telephone service. Its hotels are very bad, but there is a

FLOWING WITH A CROOKED STICK IN THE HUANCAYO VALLEY, PERU.

THE CRATER OF MOUNT MISTI, PERU.

restaurant run by an Italian, whose name is Morisini, where I got the best dinner I had in a public restaurant while in Peru.

The Jesús Springs, near Arequipa, are famous the world over for curing gout and rheumatism, and people from every section of civilization, who can afford the trip, come here to drink the water and bathe in the springs. Some marvelous cures have been made, and as the water is bottled by a local company it will soon be exported to Europe and the United States.

The buildings of Arequipa are in most part constructed of a light-colored, porous, volcanic stone, brought from quarries near by. The walls of the buildings are often three to six feet thick, and windows facing the street are protected with iron bars. They look as if built to resist earthquake shocks.

THE HARVARD COLLEGE OBSERVATORY, NEAR AREQUIPA, PERU.
MOUNT MISTI IN THE BACKGROUND.

Since, ultimately, the rubber industry of Peru promises to be very great, and since the development of the automobile, and many other inventions, makes the demand for rubber enormous throughout the world, a brief *résumé* of Peru's resources in the way of this commodity may prove valuable to some readers.

There are three things necessary to make the rubber industry of Peru one of the most, if not the most, important industry of the country. These are effective means of transportation (railroads, cart roads and burro roads), capital for development, and the necessary labor, with the proper men to handle and manage the same. The great rubber territory of Peru is embraced by the Madre de Dios (Mother of God), Tambopata, Tambari, Heath and Ucayali Rivers.

The Government has made large grants or concessions to companies and individuals in the rubber territory, and in most part these companies or individuals have only to build a cart or burro road to comply with the conditions imposed by the Government to make the grants perpetual. Rubber properties may be bought outright from the Government for one dollar a *hectare* (about two and one-half acres), or an individual may

export rubber from Government land by paying five cents per acre rental per annum.

The value of a rubber "estate" is figured by the number of laborers that can be obtained, not by the number of rubber trees, and at present labor is undoubtedly scarce in the country. Some writers have said that the Indians of the interior rubber country are man-eaters and impossible as workmen. I find this a misstatement. There are Indians in the rubber forests, who, properly managed and treated with kindness and tact, make as fine laborers as can be found anywhere in the world. The trouble has been that white men have gone into some of the rubber districts and ill-treated the Indians; naturally these red people have sometimes been savage and resentful.

This is a common phase of human experience; well-intending men have always had to suffer loss and restrictions of free-

dom by reason of the wrong things done by the mean and and foolish. An acquaintance of mine who is very bald once sat reading, while a half-dozen flies were skating across and having a good time upon his shining bald crown. He gave them no heed, until finally one of the flies bit him, when he reached up his hand and brushed them off impatiently. "There," he said, "of course you couldn't enjoy a good thing when you had it; one of you had to bite me and spoil the whole game; now you all have got to quit and get off the skating-rink," and he aimed another slap at them that sent them flying. The moral is obvious.

The first thing a capable and knowing manager does in taking charge of a rubber estate is to plant rice, bananas, maize and *yuca* (a kind of large potato) to insure food for his laborers, and as the land is very fertile, this is a quick and easy

INDIAN WOMEN SELLING CARVED IMAGES,
JULIACA, PERU.

proposition. Some estates have imported Japanese workmen, but it is said they are impossible in the rubber forests. They destroy the trees, are unclean in their habits and demoralize the Indians with whom they come in contact. The destruction of the trees is a very serious matter, for it is entirely unnecessary. As it requires fifteen years for a tree to reach full maturity, their ruthless slaughter removes the industry farther and farther away from transportation.

My attention was particularly called to the Tambopata Rubber Syndicate's great rubber territory at the headwaters of the Tambopata River. This company has been the most successful in Peru in obtaining labor and rubber, and its success is due to the experience and management of Mr. Arthur C. Lawrence, who has supervised rubber estates in Mexico and Bolivia. The company is an English syndicate, and until recently its properties were in Bolivia, but with the readjustment of the Peru-Bolivia boundaries, the concession became a part of Peru.

There are two kinds of rubber obtained in Peru, the *hevea* (the best Para) and the *castilloa* (or *concha*, as it is improperly called by the Indians). The trees are tapped (cut) by men

called tappers, every day except Sunday and feast days, during the season of seven months. Each workman taps from one hundred to one hundred and fifty trees a day. The tappers are paid from thirty-five to forty cents per pound for fine, or *hevea*, rubber. The cost of a quintal (100 pounds) of rubber delivered in Europe is seventy-five dollars, or seventy-five cents a pound, and as it is sold for over a dollar a pound, you see there is a big profit in the industry, notwithstanding the great difficulty of getting it out of the forests of Peru.

Mollendo is the coast terminal of the Southern Railway of Peru. The town is built upon a rock one hundred feet above the sea and has a population of 5,000 people. The port has a pier about three hundred and thirty feet long and two five-ton steam cranes, but it is necessary to load and discharge cargoes by means of lighters. Water for domestic and other purposes is obtained from the Chile River, eighty-five miles away and 7,275 feet above sea level. The water is brought to the town through an eight-inch iron pipe belonging to the railway company.

Mollendo is a submarine cable station, and has communica-

STONE BRIDGE OVER CHILE RIVER, AREQUIPA, PERU. MOUNT
MISTI IN BACKGROUND.

INTERIOR OF LA MERCED CHURCH, AREQUIPA, PERU.

tion by steamer with ports on the western coast of South America, and with San Francisco, New York and European ports. Wireless telegraph stations have been established in Peru connecting the principal points; an aviation school under the direction of the Government has been inaugurated; a comprehensive scheme to encourage emigration to the far interior valleys has the sanction and aid of the State authorities, and students are being sent to the great educational institutions of the United States in numbers, some with free scholarships provided by the Peruvian Government. These are a few examples of the spirit of progress that is abroad in Peru.

The expression "Church and State" would better explain Peru's condition if it were reversed to "State and Church." For nearly three hundred years the Catholic Church was supreme in matters of State, but that time has passed. A highly-educated and broad-minded Christian gentleman of one of the leading families of Peru expressed the situation to me as follows:

"The Catholic Church still receives some financial support

• A BIT OF THE WATER-FRONT, MOLIENDO, PERU.

from the Government, but its political power is fast disappearing. Several bishops are members of Congress, being elected by the voters of their districts, and they exercise considerable influence on legislation. The churches are not so well attended as formerly, women and children being the most constant in attendance. Once each year, every man, woman and child, true to the faith, devotes an entire day exclusively to public religious duties." The Catholic Church of Peru is fast assuming the same relation to the State that the churches in the United States occupy.

The future of Peru is not difficult to forecast. No nation in South America has had so many difficulties to overcome. First, within the age of recorded history, the country was wholly Indian, under the rule of the Inca worshipers of the Sun; second, an Indian country under Spanish rule, dominated by a Christian (Catholic) religion, greedy for wealth and power; third, a new republic of mixed races and a forced religion. The resources of the country depended upon labor—not always willing or free; the country was rent by almost constant revolutions, and though it was rich in minerals, nitrates, sugar, cotton, rubber, rare woods, cattle, sheep, grains and all tropical products, industry stood stagnant while sectional feuds were fought. The great war with Chile was a blessing in disguise, for while it made the rich poor, the strong weak, and robbed Peru of her splendid nitrate fields, it closed and healed many of the feuds and causes of revolutions, and left Peru one nation, one country, and everybody for Peru, and not for themselves.

Dire necessity has forced the Government to be tolerant, fair and as unselfish as the most liberal country in the world. The men and women of the leading families are cultured, educated and generous; many of them speak English and French as well as Spanish, and while their homes are exclusive, their hospitality is the most genuine I have ever experienced. Their laws are fair to foreigners, and are enforced, and capital is secure and protected. With the opening of the Panama Canal, Peru will sustain a closer relation with the United States, and we will become close neighbors and better friends.

BOLIVIA

Area, estimated at 709,000 square miles, or about the size of France, Belgium and Holland combined, and a little smaller than Mexico—Third republic in size in South America—Population, about 2,300,000, of which only one-fifth are white, the remainder being Indians and mixed races—Large producer of silver, tin, copper and rubber—Exports (1910) \$22,700,000, imports \$14,775,000—La Paz nominal capital, population 80,000—Standing army 2,500, subject to service in time of war 240,000.

CHAPTER X.

BOLIVIA AND THE WORLD'S OLDEST CITY.

BOLIVIA was named for Bolívar, the Liberator. Its earlier and later history is of a like character with that of Peru, save that it is, if possible, a still more dramatic and terrible story. Bolivia's history, of which there is actual chronicle, began in the days when the great Inca brothers, Huascar and Atahualpa, were contending for the mastery. The strife of those wars was succeeded by the years of carnage embodying the Spanish conquest, and after that by long decades of



A CHOLA GIRL,
BOLIVIA.

slavery to the Castilian tyrants. Following this dreadful era came the wars of Bolívar, and Bolivia became the central battle-ground of one of the fiercest and most protracted revolutionary struggles of which we have any knowledge.

When, after fifteen years of war, the Spaniards at last were overthrown and liberty was won, there followed more than a half-century of misrule under different dictators and official scoundrels. But measurable peace and security finally settled upon the Great Plateau, and the modern movement toward prosperity and national greatness began.

MR. BOYCE, MR. HORACE G. KNOWLES, UNITED STATES MINISTER
TO BOLIVIA, AND MR. GULICK.

In its physical features Bolivia is very distinguished. No other country, as a whole, rises quite so near the sky, unless it is Thibet, China. The major part of the population live their lives in the rarefied atmosphere of 12,000 feet above sea level. Piercing the heavens from Bolivia's enormous plateau, rise the greatest number of lofty mountains found in any country, save northern India. This cloud-kingdom has been aptly compared to Switzerland by an appreciative writer. He says:

"Bolivia is the third largest of the South American republics, and, like Switzerland, must be entered through foreign territory, for since the last war with Chile she has had no outlet to the sea over her own territory. But Bolivia shares with Switzerland the advantages of a mountainous country,

A GLIMPSE OF LAKE TITICACA.

difficult of access by enemies, and capable of rearing and sustaining a sturdy race of progressive, liberty-loving people.

"Infinitely behind Switzerland in education, stable civil government, refinement and cleanliness of the people, it is yet like Switzerland in present day prosperity, while its resources are infinitely beyond Switzerland's, if only they were developed. Bolivia is a Switzerland of loftier Alps, larger lakes, and far more extensive table-lands, a Switzerland with silver, copper, and tin in unlimited quantities; a Switzerland that can produce rubber, cacao, and quinine as can no other land, were these riches fully developed; a Switzerland where every product of the temperate or tropical zone will flourish."

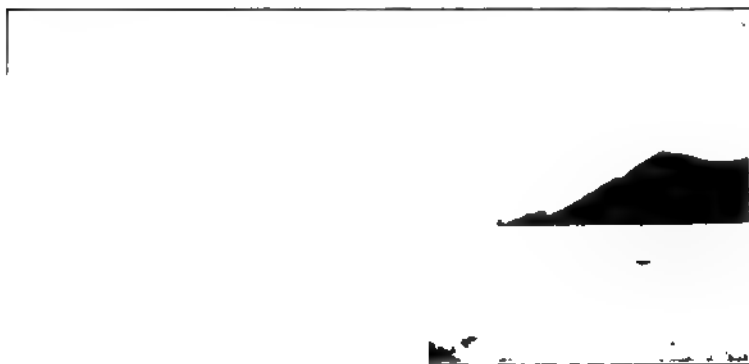
I came to Bolivia by rail, arriving at Puno, on the Peruvian side of Lake Titicaca, at six-thirty o'clock in the evening, in the midst of a heavy rainstorm. One half of Lake Titicaca is in Peru, and the other half in Bolivia, which fact gives rise to the saying among the Peruvians that "Titi belongs to us, while Caca belongs to the Bolivians."

This lake, which is the highest navigable body of water in the world, is situated 12,500 feet above sea level, and the boat on which we were to cross the lake to Bolivia was brought from Europe in parts by sea, and from the coast up to the Great Plateau by rail, and put together on the shore of the lake. Lake Titicaca is the largest lake in South Amer-

ica, being one hundred and fifty-five miles in length and having an average width of forty-four miles. Its water is always icy cold, and a curious fact about it is that no metal, even iron or steel, will rust in it. This large body of water is an irregular oval in shape, having many bays along its coast, and in its interior are eight large and fifteen small islands. The outlet of Lake Titicaca is the Desaguadero River, which flows into Lake Poöpo, another large lake wholly in Bolivia. Lake Poöpo lies 12,000 feet above sea level, is about the size of the State of Rhode Island and has no visible outlet.

We were met at the boat by Mr. Fairweather, general manager of boats and traffic on Lake Titicaca, who saw that we were given comfortable quarters aboard the *Inca Queen*, to give the boat its English name. We were up early the following morning to see some of the beauties of the lake and surroundings. It was cold, due to the wind sweeping down from the glaciers topping the mountains on either side of the lake, and we were glad to put on our overcoats.

On the shores of Lake Titicaca are the ruins of large buildings erected by a race that inhabited this region before the rise of the Incas. There is a legend that these people were the progeny of the South American Adam and Eve, who lived in the prehistoric Garden of Eden on the beautiful *Isla del Sol* (Island of the Sun), in Lake Titicaca. According to the tradition, Adam and Eve lived here for thousands of years, their children emigrating to the lands beyond the



ON LAKE TITICACA, BOLIVIA.

BALSAS BUILT OF CANE, ON LAKE TITICACA, BOLIVIA. (THE HIGHEST NAVIGABLE BODY OF WATER IN THE WORLD.)

mountains. At one time, so the Indian story goes, Adam became incensed at some of his children in the interior, and taking a great slungshot, fired a heavy granite stone in the direction of his bad children. The great stone struck the side of a mountain, tearing a big slice from it, which in falling, destroyed the rebellious children.

We arrived at Guaqui at ten-thirty o'clock, and owing to the courtesy of the Bolivian minister in Lima, who had given me a letter to the captain of the port, our baggage was allowed to pass through the custom house without inspection. We were met at Guaqui by Mr. J. Pierce Hope, the general manager of the railroad from Guaqui to La Paz, with whom we started in his private car on our journey to La Paz, the capital of the republic of Bolivia.

Our car was sidetracked at Tiahuanaco, dubbed the oldest city in the world, so that we might view and take photographs of the old pre-Inca ruins, and on our journey about the place we were followed by a curious group of Indians and their dogs. We walked through the old burying ground of the pre-Inca people, and found it much like a dumping ground. Archeologists have excavated here and have turned

up thousands of pre-Inca bones, which we found lying all about. I picked up a large thigh bone, which had likely been of great service to its owner centuries ago, and hit one of the mongrel dogs, as it was snapping at my heels. But it had no effect. The occurrence suggested to me the old adage: "You can't make a dog yelp by hitting him with a bone."

It is interesting to note the construction of the pre-Inca foundations and to marvel at the huge granite stones so nicely and evenly put together. Studying the topography of the surrounding country, I concluded that these great stones must have been brought from the mountains by water, through

FRAGMENTS OF A PRE-INCA RUIN.

channels constructed by this prehistoric race. The railroad has taken out five hundred carloads of stone from Tiahuanaco to construct bridges along its line, but none of these stones has an inscription on it. There are four large stone steps leading to a head step, which is a huge single hewn stone 32x16 feet, and on each side of it are two heavy pillars. This is supposed to be the entrance to the court of the temple that the prehistoric people here built to the Sun. All around are curious stone figures with strange inscriptions on them. Archeologists tell us that in Tiahuanaco flourished the most advanced of the ancient American civilizations.

In this quarter of Bolivia we found the Aymará Indians, descendants of a people conquered by the Incas just before

the coming of the Spaniards. It is very cold in Tiahuanaco, but the natives do not seem to mind it; they go barelegged, but keep their heads warm, tying bands of cloth woven from llama wool over their hair under their hats.

After our inspection of the ruins, our car was attached to a special engine, and we were whirled away toward La Paz. We arrived at Alto La Paz, about 14,000 feet above sea level, at seven o'clock in the evening, and our car was

attached to an electric engine, for we had to descend 1,500 feet into the valley, where lies the city of La Paz. I shall never forget my first view of the highest capital in the world as we came up to it in the night. It looked like a picture in Fairyland, as it lay spread out in the valley below, illuminated by thousands of electric lights, and high above all, shining like a beacon, the great arc light on the monument erected to Pedro Murillo, the first Bolivian patriot to shout, "Viva, Bolivia!" and advocate rebellion against the Spaniards. Unfortunate man! The Spaniards captured him and cut off his head! Nevertheless, contemplate free Bolivia! It is the lesson of history that every step forward gained by the human race has been won by struggle and sacrifice.

The valley in which La

A MONOLITH AT TIAHUANACO,
BOLIVIA.

Paz lies is surrounded by mountains, the highest of which is the snow-capped Illimani, 22,500 feet above the sea. The Chuquiyupu River, formerly rich in gold, flows through the city. The construction of the buildings of La Paz is exceedingly substantial. The houses are of Spanish style, with thick walls of stone or adobe, and roofs of terra cotta tile. The walls and roofs are painted in variegated colors, ranging from solid red or blue to the most delicate shades of pink and lavender. The city is very hilly, and one will pause two or

MR. BOYCE IN DOORWAY OF AN ALMOST OBLITERATED TEMPLE,
AT TIAHUANACO, BOLIVIA, THE OLDEST CITY IN THE WORLD.

three times to get his breath as he climbs from one street to another. In fact, it is so steep that all carriages have four horses attached.

They have no earthquakes here, which is fortunate, on account of the elevation. In this city most of the packages and freight are delivered on the human back. I saw one small man with two

THE OLDEST MAN IN BOLIVIA, AND
A DIRECT DESCENDANT OF THE
INCAS.

hundred pounds of flour going up a seventeen per cent grade. All coffins are delivered by being carried on the head, either "empty or loaded." To save lumber and at the same time make a pillow in the coffin they are scooped out underneath the head. Many coffins are made from packing boxes, as lumber costs \$135 per 1,000 feet.

There seem to be no barred windows now in Bolivia, with sighing *señoritas* behind the bars. In truth, I found that this old-time Spanish custom is fast disappearing all over South America. Roller skating and dancing were being enjoyed by the "men and maids" of

A PRE-INCA STATUE, BOLIVIA.

INDIAN WOMAN WEAVING PONCHO, BOLIVIA.

AYMARA WOMEN LAUNDERING IN STREAM, BOLIVIA.

La Paz when we were there. My secretary, who had led many a cotillion in Washington, tried to dance every number at one of the balls, but lost his heart to a beautiful maiden—a direct descendant of the Incas—or it may have been to the altitude, which is 12,500 feet. However, I think it was the *soroche* that captured him, for he usually got over any South American love affair in twenty-four hours, while this attack lasted six days.

The street cars in La Paz stop running at seven p. m., and there are no theaters. The explanation of the latter condition is that singers and actors coming into this high altitude cannot "catch their breaths" long enough to sing or speak their lines properly.

The flour used in Bolivia is *Americano*, and is of various brands, mostly from the Pacific Ocean States. The underclothes of all but the wealthy class are made from the flour sacks, brand and all. Only the rich people wear shoes. A

native who lives to be thirty-five or forty years of age is considered quite old, as exposure and drink age the people very rapidly. As mechanics, the men learn to do one thing and do it apparently well, but from the time they are about thirty years of age the drink habit begins to degenerate large numbers of them, and like all alcoholized persons, they become inefficient.

Living in La Paz is said to be more costly than in any other South American city. My investigations convinced me that here the expenses of life were not so very much below the high prices of North American cities. The only cheap commodity in La Paz is labor, which is surprising, in view of the cost of living. Common labor may be had at from thirty to sixty cents a day, while skilled laborers get from seventy-five cents to one dollar and fifty cents for a day's work.

The houses have no chimneys, as they are never heated, and all the cooking is done outside. Coal costs forty dollars

A MARKET SCENE IN LA PAZ, BOLIVIA.

a ton retail in La Paz, and it is all brought from Australia. Needless to say, very little of it is used. The compost of the llama is mostly used for fuel, and one of the interesting sights of the city is to watch the long llama pack trains winding their way into the town and through the streets, carrying loads of commodities from the surrounding country.

The city of La Paz has a system of underground drainage. The population is about 80,000. There are three distinct classes of people in La Paz—the pure-blooded descendants of the Spaniards; the Cholos, half Spanish and half Indian; and the full-blooded Aymará Indians. The pure-blooded Bolivians of Spanish descent constitute the aristocracy of the country, and the women have pretty faces and big brown eyes. They dress much like the women of the United States, except when going to church, on which occasions they wear black clothes, and the faces are half hidden by the *mantos* draped about the head. The Cholos, the half-caste of Bolivia, are a hard-working, saving people. The Aymará Indians are short, stocky people, lazy, and in most part, unambitious. The men wear trousers split at the back up to the knee to give them greater freedom in walking up hill, and *ponchos* (brightly colored shawls through the middle of which the head is stuck) constitute their chief adornment. The poor Indian women wear a scanty skirt and dirty shawl, and often, peering out from the inside of a second shawl swung over the shoulders, is the ruddy face of an Indian baby. The babies are strong and seldom if ever cry.

The police in La Paz are a fine-looking lot of men, and during the night they blow their mournful whistles every half-hour to let the neighborhood know that all is well. In Constantinople the policemen beat on the sidewalk with their billies every half-

hour of the night for the same reason. There is no fire department in La Paz, as they almost never have a conflagration.

We received a visit, one afternoon, while I was writing, from the secret police of Bolivia. It seems that the chief of police and the Minister of War got the notion that we were spies. They had never before seen any one in the city taking photographs on such an extensive scale as we were doing—photographs of the President's palace, the city, the public buildings, the military barracks, and other objects of interest. Necessarily we had to quiet the fears of the officials by assur-

ing them that we were just plain citizens of the United States, interested harmlessly in South American affairs. We found the photographing of the "lower orders" less easy than making pictures of the buildings. Whenever we aimed a camera at the Indians, they, in most cases, took to their heels, frightened by the amazing "guns" with which we "covered" them.

AYMARA INDIANS, BOLIVIA.

The Bolivian governmental structure is much like that of Peru—a President, Vice-President, and upper and lower chamber of representatives. The currency of the country is on a gold basis, the legal unit of value being the silver *boliviano* of one hundred *centavos*, weighing twenty-five grams, equal to about forty cents in United States money. Bolivia is sound financially, and this is due in great part to the fact that it has no navy and only a small standing army to support. Until recently it had no debt, but now it has a small one, owing to investment in

railroad building. However, this debt is well within the limits of the country's resources.

The total amount of foreign trade in 1910 aggregated \$37,477,500, and of this amount \$14,775,976 were imports and \$22,701,524 were exports, showing a good balance of trade in favor of the republic. Bolivia depends mostly upon her mineral wealth, which is widely distributed and very rich. Its copper, tin and bismuth mines are among the richest in the world, while it has given to man's uses more silver than any other country. The principal silver mines are near Potosi, and these mines have yielded, since the middle of the sixteenth century, silver in excess of \$1,500,000,000. Tin is a very important product, and a legitimate get-rich-quick article to the lucky finder, as an instance of which I may cite the case of a native who had been working for twenty-five dollars a month, but who not long since discovered a great tin mine and is now exporting \$300,000 worth of tin a month.

Rubber is also an important export of the country, and

A STREET IN LA PAZ.

like many other exports from Bolivia, is credited to a neighboring republic. Bolivian rubber, which goes down the Amazon to Pará, and is shipped thence to the United States, is practically all credited to the production of Brazil.

Three-quarters of the fertile land in Bolivia is uncultivated. The eastern portion of the country is particularly rich, and land may be bought from the Government in this section for four cents an acre. The most primitive methods are employed in cultivation, and the natives often steal the plates that connect the rails on the railroad and from these they make plowshares. A large area of the republic is suited to the growing of wheat, but as yet this branch of agriculture has been given little attention. Cattle, sheep, and llamas are numerous, and rice, coffee and cacao are grown in large quantities. The vast forests of Bolivia are full of sarsapa-

rilla, cinnamon, camphor, vanilla, dyewood, mahogany, ebony, rosewood, satinwood, cedar and *cinchona* (quinine) trees.

The city of Sucre, near the Cachamayo River, is the second city of importance in Bolivia. It is still nominally the capital of the country, and the Supreme Court holds its sessions there, but as the President is in La Paz, and the Congress assembles there, and the foreign representatives, also, it is really the capital. Sucre has a lovely climate, being only 8,860 feet above the sea. It is like spring there the year around, and the wonder is that people should prefer cold La Paz to it, particularly as the dwellings in Sucre are finer than those of La Paz and its people are highly educated.

Cochabamba, two hundred and seventy-nine miles by road from La Paz, is the principal agricultural city of Bolivia, being situated on a well-cultivated and fertile plain 7,244 feet above sea level. Manufacturing interests are represented in Bolivia by soap and starch works, tanneries, breweries, potteries and cotton and wool spinning establishments.

The United States minister arranged for myself and secretary to meet the President of Bolivia, Señor Elidoro Villazon, and his Secretary of State. We had an hour's talk with the President whom we found to be a very amiable and well-informed gentleman, very much interested in the progress of his country.

The United States Minister to Bolivia is the Honorable Horace G. Knowles, of Delaware, who represented Uncle Sam in the Balkans during the Turkish rebellion.

SOLDIER ON GUARD AT PRESIDENT'S
PALACE.

He is one of the most cultured and intellectual men in our diplomatic service, and has made an enviable record in handling our country's affairs with other nations. Mr. and Mrs. Knowles stand first in diplomatic circles in Bolivia, and Mr. Knowles' reception by the Bolivian Government was the most elaborate and hospitable ever given a representative of a foreign country. His presentation address referred to the Monroe Doctrine, and he placed that important policy before Bolivia, and all South America, in its right light. He has been quoted as an authority on the interpretation of the Monroe Doctrine in all the South American papers. We are proud of him because he formerly was a newspaper man, and is a broad-minded, capable official in the right place—but decidedly underpaid.

A serious question is: How long can the United States employ such able men as Mr. Knowles, and other gentlemen of his class, in the diplomatic service at "starvation wages"? An American away from the United States should feel perfectly free to go to his representative for information and aid, and feel that his country is paying for it. But when one knows that Uncle Sam is paying our diplomatic representatives what, in most cases, is hardly equal to decent house rent, one feels that any call upon their services is an imposition.

There are millions of dollars of American capital invested in Bolivia and

VIEW IN THE OUTSKIRTS OF LA PAZ.

other countries of South America, and there are questions arising every day that require diplomacy in their adjudication, for a most trivial matter, if not settled amicably, may cause our United States investors heavy financial loss. The people of foreign countries must, to a certain extent, judge the United States by the appearance we present in comparison with other nations. We are supposedly the wealthiest nation in the world, but our standing is humiliatingly poor abroad, and what standing we have is gained by our wealthy, patriotic representatives going down into their own pockets to maintain it. Hence I am an ardent advocate of larger remuneration for our foreign representatives, and ampler and better conditions for them in every way.

In the main, what put Bolivia prominently before the world was the building of three railroads from three ports on the Pacific, and a contract to connect with a rail head in Argentina, which will open the inland capital and republic to

the Atlantic Ocean, two thousand miles away by rail. All of these roads are aided by the Bolivian Government, either by guarantee of bond or cash subsidy and large land grants. Bolivia now has within her borders over four hundred miles of railroad in operation, and over four hundred miles in course of construction. A few years ago there was not a mile of railroad in the country.

The first Bolivian railway was built from La Paz to Lake Titicaca by the Government and was sold to the Peruvian Corporation, which owned the boats on the

LLAMAS AND STREET IN LA PAZ.

lake—four steamers of from four hundred to fifteen hundred tons.

La Paz has always been referred to as the most inaccessible city in the world, with the possible exception of the Forbidden City of Thibet, China. Fifteen years ago an English engineer, after wandering around South America for several years in the employ of a French company, landed in La Paz, and stayed there. He has done for La Paz and Bolivia what Henry Meiggs, an American, did for Peru. I refer to Mr. J. Pierce Hope. He was employed by the Bolivian Government, and put in charge of the public works, and now La Paz is one of the best built and most sanitary cities in South America, and is connected, in all directions, with the outside world.

Relative to the three railroads connecting with the Pacific, the first is the Mollendo-La Paz route, via Lake Titicaca, which

is six hundred miles in length. The second is from Antofagasta to La Paz, seven hundred miles, all rail. The third is the Arica-La Paz, four hundred miles in length, which will soon be completed. This last route has the disadvantage of thirty miles of "cog" road over a mountain pass sixteen thousand feet high, and will be very expensive to operate.

The Government of Bolivia released to Brazil, for \$10,000,000, a strip of territory next to that country, and this money is being invested in helping to build a railroad around the Madeira Rapids, to open an outlet by way of the Amazon River to the Atlantic Ocean. This great project I will take up more fully in a later chapter. No country anywhere is at present doing more to "be on the map" than Bolivia, and with her great area and great variety of products, she must be reckoned with very seriously in the future. Thirty years ago Bolivia was "not on the map." It happened this way: The English minister demanded an apology from the President of

Bolivia for what he considered an insult to himself and family, but the only answer he got was his "papers" and an escort to the boundary line. The jolt to his pride, and the discourtesy to his country was more than he could stand quietly, so he expressed himself very emphatically to the officer in charge of the guard, who proceeded to impose new and additional disgrace by placing the minister on a mule, with his face toward the mule's tail, and in that way escorted him through the streets of La Paz. The British Government decided that Bolivia was beneath her notice, and no demand was made for an apology or satisfaction of any kind. All that Great Britain did was to paint out the Republic of Bolivia on the map of South America, and when requested to send another minister or diplomatic representative replied: "We find no such country as Bolivia on our map." The United States minister represented the British subjects in Bolivia for a number of years, and it was only re-

INDIAN FAMILY'S HOME IN A RUIN OF
THE "OLDEST CITY."

cently—since English capital has been invested largely in railroads and Bolivian bonds—that the English Government has sent a representative to this republic.

Toward Bolivia every citizen of the United States ought to entertain a sort of “close to home” feeling, on account of it being the only country in South America named after Simon Bolívar, who had many of the qualities of our own George Washington. The ambition of Bolívar was to liberate all the countries in South America from Spain and form them into one grand republic. Had he succeeded, the United States would have had a most formidable competitor. There is little doubt but that South America, in every way equal if not superior to North America in climate, products and extent of territory, would have received much of the European immigration that has entered the United States, and the great North American republic would, possibly, be occupying the second instead of the first place in the Western Hemisphere.

CHILE

Area, 307,620 square miles, approximately the size of the States of Texas and Virginia combined—Population 4,000,000, including some 50,000 Indians—Chief resources, nitrate, silver, copper, wool, hides, agriculture—Total exports (1910) \$120,021,919; imports \$108,582,279. Exports to the United States (1911), \$19,941,000; imports from United States \$12,044,578 Capital, Santiago, population 400,000—National debt \$125,000,000. Standing army 17,500; all physically capable males from 18 to 45 years of age liable to service in time of war—Navy, 7,000 officers and men, eighth in strength of the world's navies.

CHAPTER XI.

SCENES IN NORTHERN CHILE.

ONE thing I hold against whisky is that it makes some men imagine that they can sing. One unfortunate thing about visiting strange countries is that it makes the traveler want to write. In both cases the performer "afflicts" his friends and the public because of "inspiration," but there is a difference in the character of the stimulant. The man who looks upon towering mountain ranges and is stirred to lofty thoughts, who sees in strange human faces the inherited marks of old historic struggles, who stands in wonder before the works of hands that have been dust for ages, is likely, I believe, to be a better man afterward. With the drinking of whisky it is not so; there the parallel ends.

Chile, by reason of its odd topography and the romance of its history, attracts the traveler strongly. Once within its borders, the investigator begins to find interesting objects and phases on every hand. I entered the country near the north

OLD-FASHIONED STREET CAR IN
COQUIMBO, CHILE.

end of it, and at once anticipation was awakened by two things—the nitrate fields, in battling for which thousands of human lives were lost, and the surprising thinness and still more surprising length of the country we were to traverse in our journey toward the south. Chile is less than one hundred miles in width, on an average, but is twenty-seven hundred miles in length. Fancy a nation bound to a strip of territory from sixty to one hundred and fifty miles wide and extending from New York to eastern California and you have it. The unusual always provokes curiosity, and such a country as Chile, and the people that inhabit it, can hardly fail to hold the traveler's close attention.

To George Smith, a Scotchman, the Republic of Chile is indebted for a discovery that has brought it great wealth, for it was he who accidentally stumbled upon the fact that nitrate, or saltpeter, is an excellent fertilizer. Smith at the time was living in the village of Pica, near where the city of Iquique now stands, and he had a small garden of fruit and flowers which he cultivated.

One day he observed that the trees and plants which were banked up with soil containing a strange white substance, flourished more than others. Being of an inquiring disposition, Smith's observation led him to make numerous experiments with such success that his brother-in-law, who was in the canned fruit business, took a few bags of the white substance to England to give to the farmers, from whom he bought his fruit, that they might try it in their orchards. This was the beginning of an industry that has grown to enormous proportions.

At present the nitrate industry of Chile, which gives employment to about fifty thousand men, and pays the Government \$37,500,000 annually in export taxes, is practically the basis of all business transacted in the northern part of the republic. Tramp steamers, colliers and sailboats alike, discharge their varied cargoes from the different parts of the world in Chilean harbors, and then wend their way back to European and American ports, loaded to the gunwales with nitrate.

And what is nitrate? Simply sodium nitrate, commonly known as saltpeter. It had been known to chemists before

Smith's discovery, and had been used in the manufacture of powder; but now, in addition to being used in large amounts for the manufacture of gunpowder, it is the most extensive fertilizer used. The product as shipped is about 95 per cent pure, but it passes through several processes before being ready for shipment.

The crude material, locally known as *caliche*, is found on the *pampas* or arid plains as a subsoil, vast in area, and varying from a few inches to several feet in thickness. It is a crystalline mass containing sodium nitrate, sodium chloride and various potassium salts, but the *caliche* that is commercially workable usually carries from 15 to 23 per cent of sodium nitrate. The Chilean laborers—for up to date no foreign laborers have been admitted to the *pampas*—mine the *caliche* by contract, the usual proceeding being to drill a hole about six inches in diameter to the bottom of the *caliche* and then loosen up a certain area with a charge of blasting powder, which is manufactured on the ground.

The *caliche* is then loaded into small steel dump cars and drawn by narrow-gauge engines to the works, where it is dumped upon the crusher floor. Here it is fed to huge oscillating jaw-crushers which break the material to about the size of a man's fist. From the crushers the product is raised, either in cars, or by means of endless conveyor belts, to the tank floor, where it is dumped into large steel tanks having a

solution boils violently. After about four hours of boiling, the solution, which is now partially saturated with dissolved sodium nitrate, is drawn off and the process repeated with water less rich with nitrate, until the maximum amount of saltpeter has been extracted.

The now saturated solution is turned into shallow steel tanks where the action of the extremely dry air and wind soon tend to evaporate the water, the pure nitrate of sodium precipitating in the form of beautiful white crystals—the saltpeter of commerce. The crystallizing process usually requires from seven to ten days, the product then being sacked and shipped to the coast for export.

Since *caliche* contains appreciable amounts of potassium iodine, some of the works, or *oficinas*, as they are locally known, make iodine as a by-product, so that today Chile controls the market of this valuable chemical. Today the Chilean nitrate industry is practically in the hands of English, German and local capitalists, who have formed a trust to limit the product and fix the price. Recently, however, a large United States powder manufacturing concern, which has been in the habit of buying its nitrate in the open market for many years, has acquired nitrate grounds, and will probably commence manufacturing on a large scale in the near future.

There are, of course, various sized *oficinas*, but one of average capacity will turn out about 120,000 Spanish quintals (a quintal equals 100 pounds) of nitrate per month. The cost of production naturally varies with the conditions, but it is usually conceded that a well-managed plant is able to place its product aboard ship in either Iquique or Antofagasta harbors for about five shillings (\$1.20 United States money) per 100 pounds—this cost including the export tax of 70 cents per quintal levied by the Chilean Government. Since the present price paid by buyers is seven shillings (\$1.68) per quintal, which for an *oficina* producing 12,000,000 pounds per month means a profit of about \$690,000 per year, or over 50 per cent profit—the cost of a complete plant, which is about \$1,250,000, is not a bad investment.

In the past few years several “scares” have been started in Chile relative to the possibility of producing cheap artificial

nitrate from the air by electrolysis in Norway, where enormous water-power plants are used for the purpose. However, up to date the process has not seriously affected the price of the Chilean product, and England, Germany and the United States, the three chief consumers, will probably continue to draw their supplies of the fertilizer from Chile for many years to come, especially since it is estimated, and has been officially reported by the United States Government officials, that known deposits will last for another century. A recent quarterly circular of the Nitrate Propaganda Association states that a reliable estimate places the remaining nitrate of the northern Chilean fields at 5,408,204,000 quintals, enough to rejuvenate old Mother Earth for over another hundred years.

The northern coast of Chile is dry, tropical in climate, bare of vegetation, thinly populated, but rich in minerals, while the air of the coast towns reeks with the smell of saltpeter—Nature's chief gift to this part of the country.

Arica, in the province of Tacna, is the most northerly port in Chile. It is connected with the city of Tacna by a railway thirty-eight miles long, and it is the terminal of a burro road built by the Incas, connecting the port with La Paz, Bolivia, the

road being in constant use today. Rising some eight hundred feet to the southwest of the harbor is a fortified hill called El Morro. On this precipitous headland a life-and-death struggle, one of the most savage in the history of South American warfare, took place during the war between Chile and Peru, in which the latter were allied with Bolivia. The Peruvians and Bolivians mustered at Tacna and Arica numbered 6,000 and 4,000 respectively; they were poorly armed and practically without ammunition. The Chileans numbered 14,000, part of which was cavalry, and they were well armed. The opposing armies met outside Tacna and a terrible battle began. It lasted two hours and the slaughter was appalling, the Bolivians being forced to retreat up the valley of Tacna, over the Andean passes, into Bolivia. Over one-fourth of the men engaged in this battle were killed or wounded, the desperate struggle terminating at El Morro, overtopping Arica.

The Chilean commander invited the surrender of Arica under a flag of truce, but the brave Bolognesi, the Peruvian commander, refused. At daybreak one morning the Chilean army began the storming of the fortified hill. The outworks were carried by surprise and a hand-to-hand struggle ensued on top of El Morro. The Chileans overpowered their enemies and the fortress was taken.

I saw tears in the eyes of my Peruvian photographer as he looked long and tenderly at the historic hill.

"What is the matter, George?" I asked.

"Ah!" he said, "that is a sacred spot to Peru and to me; my grandfather, General Bolognesi, died there!"

Arica has been destroyed by earthquake several times, and in 1868 it was almost washed away by a tidal wave that swept in from the ocean without warning. Tourists from the United States are particularly interested in the history of this disaster, as two United States warships, the *Fredonia* and *Wateree*, were lying in the harbor at the time.

A wave sixty feet high rolled in from the sea, lifted them from their moorings, and literally swept them over the roofs of the city. The *Fredonia* was completely destroyed, and every one on board was lost; the *Wateree* was left lying on a level keel in the sand, and there she has remained ever since. About

MR. BOYCE WATCHING THE UNLOADING OF MELONS AT ANTOFAGASTA, CHILE.

half the officers and crew of the *Waterloo*, who were between decks, survived the deluge and escaped when the water receded.

Iquique, capital of the province of Tarapacá, is the largest nitrate port in the world, and its volume of exports is greater than any other Chilean port. It has one of the safest harbors of northern Chile, being protected by surrounding rocks and a breakwater. The city, which has a population of about 50,000 inhabitants, is modern in most respects, having tramways, electric lights, telephones, manufacturing plants, and wide streets which are, in most part, well paved.

Not far from the city are the rich silver mines of Huan-tayaja, which have yielded the huge sum of \$350,000,000 since their discovery, many years ago. All the coast towns of northern Chile present an aspect of prosperity, and if we had not visited the rich nitrate fields we would have marveled how such a narrow, dry, desert country could possess the wealth that here abounds on every hand.

Antofagasta, which lies at sea level and has a population of about 17,000, is the principal Chilean port between Iquique and Valparaiso, and is also the principal import and export point in Chile for trade of the isolated republic of Bolivia, to which country it once belonged. There are no docks here, and the loading and unloading of ships is accomplished with lighters. There is a railroad from Antofagasta to La Paz, the capital of Bolivia, and although the greater number of locomotives used on this line are English, they have to depend upon American-built engines to pull the trains up the steep grades.

If you ever visit Valparaiso, I would advise you not to arrive there in carnival time, as I did, else you will find all business suspended, the custom house officials amusing themselves throwing colored paper at pretty girls, and only the porters willing to work, and they for a holiday price.

Valparaiso is the principal Chilean port, and the capital of the province of Valparaiso. It is situated midway between the northern and southern extremities of Chile, and is connected by rail with Santiago, the capital of Chile. There are no docks or wharfs at which large boats can land, and all commerce between the city and ships is carried on by means of lighters. It is one of the least secure of the West Coast harbors,

THE GUAYACAN MINES, CHILE,

as the bay opens to the north, and when the "northerners" come the surf dashes over the sea wall and more or less damage is done.

The city, which has a population of about 200,000, is built upon nineteen hills, ranging from three hundred to eleven hundred feet in height, in many cases being separated by deep gullies, through which flow narrow streams of water. In the level part of the city the streets are generally straight, but the hill streets are reached by winding roads, stairways and inclined tramways. The tramway system is owned by a German syndicate, and the cars are double-decked. First-class passengers ride inside, while second-class passengers climb up a winding stair to seats on the top, and, in my opinion, have the best of it, in addition to paying only half fare, or two and one-half cents.

The conductors are, in most part, women. It seems that during the war with Peru and Bolivia so many men were absent as soldiers, that the mule car line employed women as conductors. They proved to be so much more honest and efficient than men that they were continued in service after the war, and when the electric lines were built by German capital they were again employed.

This choice between the sexes at once presents to the mind the perplexing question of which is really superior, the human male or female. I shall not permit myself to discuss this dan-

PHOTOGRAPHED FROM THE DECK OF STEAMER.

gerous topic, more than to mention a brief verbal encounter between a man and woman, which, I am told, recently took place. The two persons had become slightly heated in the argument, when the man asked:

"Why do you consider women superior to men in intelligence, madam?"

"Well, a bald-headed man buys hair restorer by the quart, doesn't he?" asked the woman.

"Er—yes," assented the man.

"Well, a woman doesn't waste time on hair restorers; she simply buys hair," replied the woman. Floored, the man went out, it is said, and butted his bald head against a stone wall.

The city of Valparaiso has progressed, notwithstanding the terrible misfortunes that have overtaken it. Founded in 1536 it was captured and sacked by Drake forty-two years later; again, some eighteen years afterward, by Hawkins, the buccaneer; then Van Noort, the Dutch pirate, took his turn and plundered the town. It was destroyed by fire in 1858 and bombarded by the Spaniards in 1866, but the worst calamity that befell it was in 1906, when one evening, after a day of unusual calm, there was a sudden shock of the earth, followed by another, and the entire city seemed to swing back and forth; then there was a terrible jolt, as if all the pent-up subterranean energies of the earth were trying to break forth at one point, and whole rows of buildings fell with a roaring crash. The gas and water

VIEW OF THE HARBOR OF VALPARAISO,



A NEAR VIEW OF THE WATER-FRONT

THE PRINCIPAL PORT OF CHILE.

OF VALPARAISO, CHILE.

mains and electric light wires were snapped, and the city was in darkness. A few moments of terror ensued, then the darkness was dispelled by numerous fires that sprang up here and there—funeral pyres to hundreds, torches to guide others who fled from the stricken city as it was swept by a great storm.

It is said that through the earthquake and fire ninety per cent of the houses were destroyed, and amid the havoc troops and citizens stood guard and shot down the human vultures that sought personal gain from the great disaster. The railways were wrecked for miles and telegraph lines were broken everywhere. The condition of the people for a few days was indescribable, over 60,000 being camped on the barren hills above the town without food or adequate clothing. The exact number of fatalities was never definitely known, but it is estimated that from 500 to 1,000 persons perished and over 1,000 were injured; the damage to property and business amounted to about \$100,000,000.

Despite its continued calamities Valparaiso (the name means Vale of Paradise) has been rebuilt and is today an enterprising commercial city with modern improvements, and is growing each year. It has a reservoir near the city limits where water enough can be stored to last three years.

The island of Juan Fernandez, made famous as the long-abiding place of Robinson Crusoe and his black man Friday, lies off the western coast of Chile, and is today the seat of the lobster canning industry. If Robinson Crusoe had no difficulty in digesting lobsters I do not wonder that he stayed so long on his island home. I had a lobster from Crusoe's famous island, and it was the finest I have ever eaten. It was about three times the size of the lobsters we have in the United States. When I say I had one, I mean I ate a portion of one, as half a single lobster was served for three and each of us had all we desired.

A "BREAD MAN," VALPARAISO,
CHILE.

TWO-DECKED STREET CARS, VALPARAISO, CHILE.

The steamers which visit Chile are for the most part British, 211 flying that flag having registered in and out in a given time; German, 90; Chilean, 55; French, 7; Belgian, 2; Argentinian, 2; Danish, 2; Dutch, 1; United States, 1. Only one from the United States! Think of that! And the United States is spending, or will spend, the better part of one billion dollars for the Panama ship canal!

CHAPTER XII.

SANTIAGO AND CENTRAL CHILE.

REGARDED with a free fancy, Chile and the Andes Mountains, when looked at upon the map, somewhat resemble an elongated centipede and a yellow ribbon lying side by side. If you look closely you will see that the very elongated centipede has several thousands of its feet planted on the ribbon along the west side, and several thousands of its feet resting on Argentina and Bolivia on the east. Continuing the simile, one sees that the centipede extends so far southward that its tail is lost in the ocean near the Antarctic region, and that it keeps its feet on the yellow ribbon until that, too, sinks into the Cold Ocean. That is why Chile has been called the "Tapeline Republic" by some, and by others the "Populated Sliver."

The products of Chile are just as diversified as is indicated by her longitudinal extremes—from 17 to 58 degrees south latitude, or, to be a little plainer, from the southern boundary of Peru to Cape Horn, which projects out into the Antarctic Ocean.

Chile should really be divided into three parts—Northern, Central and Southern. When old Mother Earth gave birth to South America she put up a great wall on the western side in the shape of the Andes Mountains to keep back the ocean, and placed her front yard of broad acres to the east of this barrier, where there was rain in abundance, and where the warmth of the sun coaxed the buds forth to drink in its glory. But her children wanted to play in the "back yard"; they didn't want to be dressed up all the time; they wanted to sleep in the morning and play in the afternoon when the shadows of the western sun began to lengthen. So good old Mother Earth heaved up the bottom of the Pacific Ocean to the west of the mountain wall she had built, and told her children they might play at "keeping house" in the newly-made "back yard."

Of course the children were pleased for a while, but soon began to want many things. Some wanted it warm, some cold, some wet, some dry; some wanted to hunt, others to fish; some wanted to mine, others to farm; some wanted to raise grain, fruits and grapes; others wanted to raise cattle, sheep and horses; but most of them only wanted to raise a fuss. So old Mother Earth let them all have their own way, and provided them all with the opportunity to have it. She put up the very highest mountains, one about 24,000 feet high, to keep off the wind and rain from the east, and in the north, between these very high mountains and the ocean, she placed only dry sands. Here the "playing" is good, but the living is poor, as they could not have dry, pleasant weather all the time and also fruits, grain and flowers. But Mother Earth knew her children would not be satisfied to play all the time, so in the dry, sandy places she deposited nitrate to fertilize the world, and up in the mountains she placed copper and rich deposits of silver. She made little rivers by melting the snow on top of the high mountains, and these small streams flowed down through the sandy soil; and her children "played" at digging ditches, and, turning the water

on the queer "soil," they raised all sorts of delicious things to eat. It sounds somewhat like a fairy story, but it is true, and it proves how very thoughtful and kind is Mother Earth.

In North America we have cold in the North and warmth in the South. In Chile it is just the reverse—hot in the North and cold in the South. In the warm, balmy air of the North the Chilean children played and slept and grew lazy and weak. Away up in the high mountains of Peru, where it was cold, there lived another family of Mother Earth's children who had to "hustle" to keep warm and get something to eat. These were called the Inca Indians, and they were stronger and braver than the lazy Indians in northern Chile, where the land was low and the weather hot all the time; so the latter were conquered by the Incas. But the Spanish had to retake the northern part of Chile, and as it was difficult to support an army in this desert country, the white men had no easy task. However, in the course of time the northern Chileans were again subdued and were ready to do whatever the Spanish bade them. They soon began to intermarry with the Spanish, and a new half-breed race, called *rotos*, sprang up. They were not much better



than the Indians, both the *rotos* and Indians of northern Chile being a lazy, drunken lot, which they are today. There are now many white people in the northern country, brought there by the lure of gain from nitrate and the silver and copper mines. They are a hard-working, hard-drinking people who soon wear out. Sanitary conditions are not modern in that region, water is scarce and nearly all food is imported.

From Valparaiso, the chief port, there is not much moisture for seventy-five miles southeast, at which point one enters the north end of the great Central Valley, which extends south for about six hundred miles. This valley averages about fifty miles in width, but as Chile is only ninety miles wide, on an average, the valley is pretty large in comparison, and it is not only the valley, but the "backbone" of all Chile. Without this valley Chile would be the poorest country in South America; with it, she is the richest for her size, for here we find growing every product of the soil that we produce in the United States.

The Government has built a railroad through the center of this valley from north to south, with branch lines running east to the mines in the mountains and west to many fine harbors on the Pacific Ocean. It already has built two thousand miles of railroad and is building two thousand miles more, a portion of which extends into the north over the sandy desert country to new mines already opened and others under development. The entire national debt of \$125,000,000 is due to investments in railroads.

The agricultural portion of this great Central Valley, which embraces nearly all of it, is divided into large farms, or *haciendas*, as they are called in Spanish, on which the owner lives when he is not in his town house in Santiago, or traveling in Europe. For some years there was considerable immigration from Germany, but now there are no farm immigrants coming to Chile. The oldest and best portions of the land are occupied by the rich "big farmers," who never sell any of their possessions, and the only way the farms are ever broken up is by division among children, who even when married continue to live under one roof with their parents and families.

Nonresidents may own land in Chile, and it is possible for a corporation to own real estate, but there is a growing senti-

THE AMERICAN LEGATION BUILDING, SANTIAGO, CHILE.

ment against this form of controlling the source from which comes the food necessary to sustain life, as it would be an easy matter for one or a number of corporations to monopolize the agricultural products.

The system of labor in vogue is largely the "tenant plan," each tenant having a house in which to live and a fixed quantity of land to work, giving his labor, or the labor of one man, to the owner of the land as the price of rent, his family working the place he rents in case he gives his own labor to his landlord. This system, apparently, works well in Chile and is deeply rooted as a custom of the country.

The owner of the land, however, has much more authority over his tenant than obtains in the United States. He is usually the local magistrate, and does not hesitate to adjudicate cases in which he is personally interested. He also runs a store to supply his tenants with necessary articles, and as credit is easily obtained, the tenant is seldom free from debt.

Through a large part of the Central Valley the rains are helped out by irrigation, hence crops are much surer than if entire dependence was placed on the bounty of the elements. It is a mistake to think of Chile as a cattle country, for it is not. Most of the cattle marketed here are brought from Argentina, as is the case with horses, sheep and swine. Pasturage is too scarce, when the value of grains, fruits and vegetables, immense quantities of which can be raised from one acre, is taken into consideration. The fruits here were the finest I had ever eaten in any part of the world, and the size and flavor could not be improved upon. There were several varieties of peaches and melons that I had never before seen. Grapes do exceedingly well, and the flavor equals the finest French and German varieties. There are many vineyards and exceedingly good wine is made, much of which is exported.

Soil and climate alone cannot make a rich country—it also requires energetic, industrious people. Let us for a moment consider the people of Chile, to better understand the results they have achieved. At the outset we have to acknowledge that the Chileans are a vigorous, pushing people. In such cases there is always "a reason." An anecdote will serve to illustrate.

THE PRESIDENT'S PALACE, SANTIAGO, CHILE.

One quiet, warm summer afternoon, a minister, in a church at the edge of a town, was trying to keep one portion of his congregation awake and the other from looking out of the windows at a baseball game that was being played on grounds in full view of the church. He was pounding the pulpit and speaking at the top of his voice, demanding to know, in the language of his text: "What shall we do to be saved?" Pausing an instant for oratorical effect, there came wafting through the windows from the baseball diamond, the clear, shrill command of an excited player, "Slide for it! Slide for it!"

For the last three hundred years in Chile there has been some vigorous "sliding" done. It has produced a race of men and women who are perfectly competent to take care of themselves and their country, and who have developed a nationality of their own.

From my own personal point of view I cannot agree with them in everything. They picked a brutal quarrel with Bolivia and Peru and took away the most valuable territory of those two countries—the nitrate fields. They might possibly have been excusable on the basis of an old disputed boundary line, and the fact that Peru joined forces with Bolivia in a quarrel that was not hers, but the world will long find it difficult to excuse the atrocities and destruction, worthy of an age past and gone, that were committed during the occupancy of Lima by the Chilean army after the war was over.

The foreign capital invested in Chile is largely English, with that of Germany next. The country has been settled, first by Spaniards, second by Italians, third by Germans, and fourth by English and Irish. There are about one hundred old families, many of them bearing pure Irish and English names, now hyphenated with Spanish prefixes or suffixes. The "one hundred family" control of governmental affairs is fast disappearing. One-half of the members of the Senate and Congress of Chile today are from the educated element of the new generation, which cannot boast of belonging to the "one hundred." Education is fostered in every way, the right to vote being founded entirely on this basis, and as a consequence the politicians run night schools just before important elections.

Morally, Chile has much to accomplish. It is said that there are more illegitimate children born here than in any other country in South America, except Paraguay, although there

MUNICIPAL THEATER, SANTIAGO, CHILE.

are no statistics on the question. The mortality among all classes and ages is very great, owing to the insanitary and unclean manner in which many of the people live, and the prevalent drunkenness which reduces their vitality. This condition, however, is disappearing, especially in the big cities like Santiago and Valparaiso, and all over the country temperance societies are being established and promoted by the church and best citizens.

The Chileans are great lovers of amusement, and as the constitution forbids bull-fighting and there are no lotteries, they find other means of recreation. Horse-racing is their chief gambling amusement, and football (Rugby style) the national game. There are many fine horses in the country and everybody rides horseback. They are fond of music and dancing, have beautiful parks and plazas in every town and city, and the people spend much time out of doors.

The State church is, of course, the Catholic, which receives about \$500,000 (gold) a year from the Government, and is

VIEW OF ONE SIDE OF AVENIDA DELICIAS, SANTIAGO, CHILE.

very rich. There is a gradual separation going on between the Church and State, and it is only a matter of time when they will be entirely separated, as in North America and most European countries.

The Panama Canal will not, I believe, benefit Chile

TYPE OF PRIVATE RESIDENCE, SANTIAGO,
CHILE.

much, nor hurt it. It will shorten the distance between Chile and the United States and Europe by water and save time for passengers, but if the canal toll is put at one dollar a ton, it will be cheaper for all freight to go from Chile around by the Straits of Magellan.

A QUIET RESIDENCE STREET, SANTIAGO, CHILE

IN THE PARKWAY OF THE AVENIDA DELICIAS, SANTIAGO, CHILE. (THE ENTIRE STREET IS 600 FEET WIDE.)

The unions are beginning to organize here and the labor people have several members of Congress.

Santiago, the capital of Chile, with a population of 400,000, lies in a great amphitheater forty miles long and eighteen miles wide, enclosed by a great wall of mountains. No city in the world has a finer location. There are many beautiful drives, parks and pleasure resorts, and on Sundays and holidays the pleasure-loving inhabitants throng these places in great numbers.

VIEW IN SANTA LUCIA PARK, SANTIAGO, CHILE.

The Alameda Avenida Delicias, the great boulevard of Santiago, is six hundred feet wide and runs the full length of the city. The finest private houses front on the Alameda. The largest of these are of Spanish style, being built around a courtyard, or *patio*, which is usually open to the sky and full of flowers and shrubs, and often ornamented by a fountain in the center.

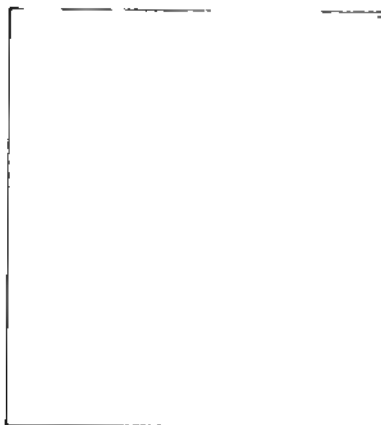
Sixty-seven miles of electric tramways are operated by a private company, which also supplies electric light. This com-

pany is an English corporation, though the stock is owned by Germans and the line is operated by the same nationality. The fare on the tram cars is two cents.

The women of Santiago are unusually beautiful, and are not stout, as is usual in tropical countries. Rich and poor alike, they all wear the *manto* over their heads when they go to church. The *manto* is a sort of black shawl folded in such a manner that it is very becoming to the wearer.

There are many churches in Santiago, and the great cathedral facing the large Plaza de Armas, in the center of the city, is

PAVILION IN "QUINTA NORMAL,"
COUSINO PARK, SANTIAGO.



A SANTIAGO LADY IN MANTO.

one of the handsomest structures in the world. It occupies the entire side of the street on the west of the plaza. The public buildings are very fine structures and are substantially built. The Moneda, a massive stone building, now the residence of the President of the republic, contains the mint and the ministerial

offices. I observed in the House of Congress a large room where they keep a complete set of books and literature of the United States Congress.

Most of the streets in Santiago are paved with asphalt, and are correspondingly smooth. The policemen carry swords instead of the "billy" familiar in the United States.

In the Quinta Normal, a beautiful park given to the city for the poor by the late Señora Isadora Cousino, are different breeds of dogs, which are kept in cages as we place wild animals in our own parks. The Señora was at one time reputed to be the richest woman in the world, and the residence she erected in Santiago is the finest on the Southern Continent.

But the park of parks in Santiago is Santa Lucia. For striking and picturesque beauty it is scarcely equaled anywhere in the world. It is a steep and rocky hill, rising to a height of some five hundred feet, almost in the heart of the city. The original scanty soil of this towering hill has been added to by the gardeners until it has become an exquisite park,

ENTRANCE TO SANTA LUCIA PARK, SANTIAGO.

lifting its green and varied masses of verdure above the city, like a great hanging garden. It is a most beautiful breathing place for the people. Flowers and creeping vines trail over the rocks in wild profusion, fountains splash bright waters in the sunlight, marble statues gleam against the greenery at every turn, cool grottoes invite you to rest in the shade, and paths and roads wind here and there. From the summit one has a superb view of the city, spread out at one's very feet, beyond it the wide, fertile plain, and far away on the horizon the mighty procession of the snow-capped Andes, that seem to hem the city in on every side. Beautiful and unique is Santa Lucia, and fortunately situated is the city of Santiago.

CHAPTER XIII.

IN SOUTHERN CENTRAL CHILE.

THOUGH it was in March, the time was late summer when we left Santiago, going still further toward the Antarctic; that is to say, it was late summer in this world beyond the equator. It seemed odd to say, "We are going South, where it is colder," and it was difficult to reconcile the fact with one's former sense of direction when one was compelled to look toward the north to see the sun and moon.

We left Santiago one evening on an electric-lighted Pullman car, to travel six hundred miles by rail, and then through a broken forest country. I had instructed my secretary and Charlie, my servant, to pack and ship everything to Concepcion, where we were to take the steamer for the trip through the Straits of Magellan, except such absolute necessities as could be transported on

TRIUMPHAL ARCH IN THE CAPITAL OF CHILE.

pack horses. Much to my surprise when I arrived at the station I found my secretary with his silk hat box in one hand, a portable bathtub in the other, and wearing his tropical helmet hat. It reminded me of an occasion when my son Ben, then ten years of age, and his young friend, John M. Smyth, got lost in the woods, half a mile from my camp in Wisconsin, and were found walking along the river carrying an old can full of water, fearing that they would die of thirst.

The first three hundred miles south from Santiago lie in a part of Chile that has been well settled for two hundred years by large farmers (*haciendas*), and where even now the owners are much like the feudal lords of bygone days in England, France and Germany. The Spaniards have never taken kindly to shopkeeping or manufacturing and even the hotels, which are not half bad, are run by foreigners—mostly French, Italians and Germans. The Spaniard's idea of "quality" is that of the land owner, where, surrounded by a half-slave race of peons, he is, to this day, an actual lord.

From north to south the rainfall increases, and irrigation gradually disappears, until one arrives in a country very much like our Northern Pacific Coast States. The products are the substantials of life—meat and wheat, with all the hardy varieties of vegetables and fruits—apples, pears, peaches, plums, grapes, etc. The harvest was over when I was there, in March, and the fields looked bare, but the stubble showed that there had been a heavy crop of grain. Wheat, the chief grain raised, is of a very hard variety, grading with our No. 1 Northern. There are no elevators, and it has to be shipped at once. It is put into sacks, two hundred pounds to the sack, and shipped to market (seaport) on flat cars, and the traveler will see whole train loads of it en route. It sells on board car net, less cost of sack, at 85 cents per bushel. I found no big cattle ranches, but every farmer raises some cattle for market. This industry is more extensive farther south.

Our first stop was at Temuco, a town of 10,000 population, five hundred miles south of Santiago. I was no sooner settled comfortably in my room at the leading hotel when the Governor (*Intendente*) called upon me, according to instructions telegraphed him by the President of the republic, and offered me the freedom of the city and province, after which I was taken for a horseback ride, dined at a fashionable club, and shown many other marks of hospitality. The following is a copy of a note written in English, which was handed me, on leaving Temuco, by the Governor of the province of Cautin:

MR. BOYCE WITH ESCORT OF SOLDIERS AND GOVERNOR AT
TEMUCO, CHILE.

"Ricardo Delez, Intendente of the province of Cautin, has the honor once more of presenting to the distinguished American periodista, Mr. W. D. Boyce, his wishes that his stay in the province in his charge be agreeable, and feels sorry that the difficulties of the language do not permit him expressing this desire verbally.

"Republic of Chile, Temuco."

That is the polite way these Castilian gentlemen have of being generous to strangers. I was constantly receiving such pleasant and valuable kindnesses while in South America.

I will add that the honorable Governor spoke some English—about as much as I did Spanish—and that while he may not have been able to understand me very well, I understood him better when he spoke Spanish than when he essayed English. The Spanish language is not hard to learn, being spoken as it is written, each vowel having but one sound.

The province of Cautin is a comparatively new country, and in the center of a large Indian settlement. The Indians are the Araucanians, that brave, hardy race that taught the Chileans to fight, and who were never conquered, but finally, after three hundred years, became partly civilized. As far back as history goes, they always did some farming, though their principal occupation was fighting. There is no record of there ever having been enough game for them to live on, as was the case with the Indians of North America. At this season of the year they were drawing much wheat to market. Ox carts are used for all hauling, the roads being too rough for horses, except for riding. No corn is raised in this part of the country, or in any part of Chile, on account of the cold nights. The Humboldt Antarctic stream in the Pacific Ocean, only a comparatively few miles away, makes a blanket necessary at night, even when crossing the equator.

Our next stop was one hundred miles farther south at Osorno, a German town of 8,000, which, like all towns in this part of Chile is built of wood and spread out over a big area. I have observed that all over South America the roofs of buildings are made of galvanized sheet iron from the United States. They have to be painted at once to prevent rusting. The people complain that they are very cold in the winter and at night, while in the summer and in the daytime they are extremely hot.

They do not use tar paper or prepared tar paper roofing, because no big American manufacturers of this product, such as the General Roofing Company of East St. Louis, Ill., Mar-seilles, Ill., and York, Pa., ever asked them to. Over 1,000 tons of this kind of roofing are used every day in the United States, but the people of South America never heard of it, and as there is no shingle timber in this country they use what they can get, which is galvanized iron.

The first German settlement in this section was in 1851 at Valdivia, a port town, northwest of Osorno, where the Spanish had tried to locate for two hundred years. It was a heavily-timbered section, but the hardy Germans soon cleared it up, changing the entire country. They were aided by the Chilean Government in colonization, and immigrants came so fast that the Chileans became alarmed and began to discourage them. The Government very wisely objects to the settlement of too many people of one nationality in one section of the country. Similarly, I believe, it would be better for the United States if the people from each foreign country were scattered more widely than they are.

The chief industry of Osorno is preparing *chaqui*, or sun-

dried meat, and there are two packing houses engaged in this business. They buy the poor old cattle principally, and one of the houses buys old horses as well. The whole carcass is cut into thin slices which are laid out flat on bamboo poles, that are raised from the ground, where they are left to cure in the sun and air. After being thoroughly cured the meat is packed in one-hundred-pound bundles and shipped north to the nitrate fields and mines, selling at twenty-five cents a pound, wholesale. At this point it may be of interest to state that in 1910 a consular report estimated that Chile has approximately 700,000 horses and mules, 2,500,000 head of cattle, 3,000,000 sheep, 500,000 goats, and 300,000 hogs. About 450,000 cattle, 600,000 sheep, and 140,000 hogs are slaughtered annually.

Osorno is the end of the railroad at the present time, an extension of seventy miles to Puerto Montt being in the course of construction. Puerto Montt possesses the best harbor on the Chilean coast, being sheltered from the storms of the Pacific by islands in all directions.

We were advised that we could ride to Lake Llanquihue in five hours, though no one seemed to know just how many miles it was to the lake. We left at two o'clock p. m. and at seven we were less than halfway to our destination. We stopped for dinner at the Hotel Ingles, kept by a motherly old English widow of the late Queen Victoria type, who forty years ago, when a charming young girl, married the Chilean, General Oliveres. Here I enjoyed the first glass of fresh milk I had been able to get in all South America.

As the boat crossing the lake sailed next morning at six o'clock, we pushed on, arriving at our destination at two o'clock in the morning. My horse gave out, so I walked during the last three hours of the journey. As our pack horses also gave out I kept myself warm by stirring them up occasionally with the aid of a club. My secretary went to sleep on his horse and fell off; fortunately he alighted on his head and his big helmet hat saved him from injury. The country through which we passed after dark, the moon going down at nine o'clock, was a dense woods, with here and there a settler's cabin from which big packs of dogs rushed out barking and snapping as if they would tear us to pieces. We learned afterward that this forest

THE SEA WALL AT PUERTO MONTT, CHILE.

is infested by bands of robbers, and people acquainted with the country shun it at night. Frequently I instinctively reached for my revolver, and Charlie said he never took his hand off his knife. The *mozo* (the man in charge of the horses) objected to making the trip in the dark, and as a result he swore very nearly every step of the way. If any one wants to know the distance from Osorno to Lake Llanquihue I can inform him that it is at least sixty miles, and that he cannot reach it in five hours on horseback, no matter what the natives may say.

The next morning we learned that the regular boat, on account of making many stops, could not take us across the lake in time for us to reach Puerto Montt and return that day, so I hired a special boat to take us across and back, at a cost of \$120 Chilean money—\$30 United States money. For six hours we breasted a head-on sea and heavy wind, all the time in sight of snow-capped mountains and white-capped waves. We were never out of sight of Mt. Osorno, a peak 8,000 feet high, which was once an active volcano. We arrived at Puerto Viras at noon, having made twenty miles in the six hours, and made the sixteen miles to Puerto Montt in three hours, over the worst road I have ever traveled.

We found Puerto Montt a representative Holland or North German city—clean and quiet, with grass, geese and healthy, rosy-cheeked children in the streets. As before stated, the harbor was the best I had seen since leaving Havana. A great concrete seawall protects the water-front. The city lies in a semicircle around the bay at the base of a line of hills that are from three hundred to five hundred feet high and beautified by gardens and vines. We stopped here only long enough to drink some of their *chicha* (cider) made from apples and pears, a combination hard to equal, and to take some photographs. We rode back to the lake in about the same time and took dinner at eight p. m. at a charming little German hotel, while our captain and his little steamer were waiting for us. We made the return trip across the lake in about three hours, but nearly swamped several times. The lake was the roughest it had ever been in his experience, the old navigator informed us, but as we had to be in Osorno by the following evening we faced the peril. The small steamer had a resounding whistle, reminding me of the traditional steamer on the Mississippi River, which was so small and her whistle so great, that every time the captain blew the whistle the boat stopped for lack of steam.

At six a. m. we “forked” our horses, and at six p. m., tired and stiff, we rolled off at our starting point, having made one hundred and fifty-two miles in fifty-four hours, the quickest time on record for the journey. We did not have our clothes off during the trip, but all I needed to recuperate from the fatigue was a bath and a good night’s rest.

The journey was replete with interesting and sometimes odd sights. Blackberries were ripe, and the bushes and vines were the largest I have ever seen. They ran on the ground, piled up in masses, climbed trees where they got the chance, and in one instance, the bushes were twenty feet high. The berries were exceedingly juicy and plentiful. I judged that at least 50,000 bushels could have been picked from the bushes we passed on the way. The vines are said to be a great injury to the country, as they grow every place and kill many trees. The clearings and fields were covered with thistles.

The cattle and horses do something here that I have never

observed elsewhere. In the winter time the grass is poor and the ground so wet that it is difficult for them to get a living, as the people put up no hay and burn their straw. The cattle and horses browse about, living on the leaf of a species of bamboo that thrives here, unless destroyed. It looks something like the elephant grass I saw in Africa, only it is not so tall. In Africa it grows from ten to fifteen feet high, while here it is only three to five feet in height and is willowy, bending so easily that at first I thought it was a species of willow. However, the cattle keep in good condition, and I was told that the milk of the cows was wholesome and sweet.

The absence of bird life, especially at "berry time," struck me as very peculiar, but I could get no explanation. I had seen no game birds nor game of any kind; had seen no one shooting, and in fact heard but one gun fired. There were no mosquitoes, nor insects of any kind in this country, and I did not see a screened window in all Chile.

Speaking of windows, the low-caste Indians of Chile build

their houses without windows, floors or chimneys. They make a fire in a hole in the ground, which is lined with stones, and put into this hole all they have to cook—meat, fish or anything else—and then put in some hot stones and cover the top with mud, cooking the entire mess together. When the food is sufficiently done, all hands, including dogs and hogs, gather to the feast, eating out of the hole in the ground, the people using their fingers as forks. Possibly it was savory enough, but certainly not very inviting.

The *ponchos*, that are worn by everybody in this section, are very brilliant in colors, being mostly striped red and yellow or blue and gold. They are very warm, and are exceedingly picturesque, as they flap in the wind on the horseman who usually rides at a gallop.

The *roto* does the only real labor that is done, except that performed by the immigrant. The pay for a *roto* is two to three *pesos* per day, fifty to seventy-five cents in United States money, hence this is no country for the white laborer. The farmer, immigrant or merchant, can carve out a place for himself not possible in an older and more settled country. He will do better still if he is Span-

COWBOY OF SOUTHERN CENTRAL
CHILE.

ish, Italian, or of Latin blood and breeding. To a man from the United States it seems odd to see everything moved by ox carts, many very primitive, with solid wooden hubs and wheels made by cutting off the end of a log. One can hear them squeak for a mile or more, and it reminded me of the old Red River of the North carts used by the Indians and traders in the early days of the Northwest.

From about 40 degrees south to the Antarctic Ocean, a dis-

tance of one thousand miles, Chile is one vast forest, the trees becoming smaller and more stunted in growth, the farther south one goes. The country is rugged and the "sliver" of land along the coast, or back to the Argentina line, is only about fifty miles wide. There are many bays and rivers, but the Pacific Ocean is so dangerous to navigate along this coast that it is difficult to get the timber to market. The Indians have cut all the soft woods and floated them to market, but the hard woods will not float. For years the medium of exchange—the only "money"—was planks and boards delivered at some port and exchanged for brandy, medicine, and firearms, with some little coast-trader sailing ship. The only white men who have ever gone through a large part of this country were the members of the Boundary Commission.

From Puerto Montt north for two hundred miles, between the mountains and ocean, there are little sawmills—we would call them "portable"—driven by traction engines. The heavy timber is cut and hewed square where the tree falls, to save weight in taking it to the mills. I watched many of these little mills at work, and formed the opinion that there would be great profits in this country for enterprising firms of the United States, if they would but introduce our sawmill machinery into southern Chile.

Of the standing timber which I observed, only the cypress and poplar look anything like the trees of North America, and the names are quite different. A tree called *alerce* has a great white trunk or stem, and grows sometimes to a height of two hundred and forty feet, with a diameter of fifteen feet. It is something like the California redwood, and the timber is excellent. Cypress is found all the way to Cape Horn, but becomes stunted as you go south. *Roblepellin*, which is very heavy, is used for posts, piles and bridges, and will last one hundred years in water. It is very plentiful. *Rauli* is used for all inside house-finishing work, making fine flooring; it is also used in making furniture, and is cheap and abundant. *Lingue* is a very strong and heavy timber, being used for casks, barrels, carts, and fine furniture, on which hand or machine carving can be beautifully executed. *Avellano* is a beautiful spotted wood, used only for fine furniture, and is getting very

scarce. However, it should be remembered that there are still one thousand miles of forest belonging to the Government that have never been surveyed or explored.

I observed the usual wanton destruction of fine forests to make room for settlers' fields by "ringing" trees and then setting them on fire after they had died. This is really criminal in any country. In the United States we have been paying dearly for the foolish destruction of our forests. The quantity of timber left has become so scarce that a gigantic trust now controls the lumber market of the United States and charges whatever price it can squeeze out of the public. Here the price is \$10 to \$20 per thousand feet, and as this is the only great timber belt left in the world, at present accessible, it is a wonder that the Lumber Trust does not try to monopolize it in some way. If the Chilean Government does not keep a sharp lookout, it will.

CHAPTER XIV.

PHASES OF CHILEAN GOVERNMENT.

THERE are no States in any republic in South America, on the Pacific coast—only provinces, governed by appointees of the President. Otherwise there would always be wars or revolutions. A strong centralized government is absolutely essential to impart solidity and permanence to these republics. Again, the provinces are divided into districts, and again the President appoints the rulers, or as they are called, Governors of Departments. Chile has twenty-three provinces and one territory, each with an *Intendente*, or Chief Governor, and I do not know how many departments, similar to our Congressional districts; but all are ruled by direct appointees of the President. The municipal organizations, or cities, including the police of the cities, are directly under the Minister of the Interior, who is one of the President's Cabinet. Thus, you observe, everything tends to a very strong centralized government, which reaches into every corner and small hamlet of the entire republic.

Strange to say, and almost beyond belief or understanding to a North American, this system does not tend toward perpetuation in office of one political party. The President is elected for four years, and is not eligible to immediate re-election. The latter fact serves as a check upon party continuity. Many people in the United States favor the election of the President for six years, with a law making him ineligible to re-election. This would take the chief executive out of politics and make him the President of all the people instead of a party.

The great difference between the political system of the United States and that of Chile lies in the fact that the Cabinet of the President of Chile is not selected by him, a

THE GREAT CONGRESSIONAL BUILDING, SANTIAGO, CHILE.

majority of this body being chosen by the Congress. This, if applied to the United States, would mean that a Republican President might have a Democratic Cabinet. Each Cabinet member of the Government of Chile has the right to introduce certain bills in Congress, and whenever a bill introduced by a Cabinet member is voted down, the entire Cabinet resigns, as it is shown, thereby, that the Congress and President's advisers are not working in harmony, and it then becomes necessary to appoint a new Cabinet. During the past ten years there have been ten new Cabinets in Chile, and it has kept the President's party busy keeping up with the changes. One excellent thing arises from this system—no party stays in power long enough to become corrupt. Nominally, the Liberal party has been in power here for years, but the many changes in the Cabinet membership show that the party's continuation in power is rather in name than in fact.

The Congress is absolutely supreme, and is composed of Senators, elected for six years, and members of the House, elected for three years, instead of two, as in the United States. Members of the House, however, receive no pay. Two years is entirely too short a period for any member of Congress to show that he even ought to have been elected; three years is somewhat better.

Of course, in Chile the strong arm for the execution of the laws and for the enforcement of the constitution is the courts. Here the system is somewhat different from that of the United States, the judges being appointed by the President, but only, in obedience to the laws of the country, upon the recommendation of the judges already holding office. Judges are appointed for life, or during good behavior. This takes them away from the corrupting influence of politics—a consummation to be heartily approved. Strange to say, the Chief Justice of the Supreme Court of Chile, Hon. Julius Foster, is the son of a merchant from the United States, who came here years ago and married a Chilean lady. He is a brilliant jurist, highly respected and honored, and one of the most delightful men I met in South America. I am satisfied from all I can learn of the courts, from the highest to the lowest, that they are equal in fairness and impartiality to the courts of the United States. This is

absolutely essential to a foreigner doing business in any country.

The Chilean army and navy are respected and feared, not only by the people of this republic, but by all other South American countries. The army has 17,500 officers and men in time of peace, with a possible increase to 150,000 in time of war. The service is well-officered and equipped with the very latest arms, the men being trained by European army officers.

Owing to the necessity of protecting the 2,700 miles of coast of this "sliver" republic, the navy is absolutely of the first importance, and it has never been defeated. Lord Cochrane, of England, who organized the first Chilean navy, during the struggle for independence from Spain in 1810-1818, did more for Chile's success in that war than any other one man. His originality and courage set an example that has been worthily followed ever since. Chile's navy ranks, with 7,000 officers and men, eighth in strength and importance in the world.

The unit of money is the dirty paper *peso*, or, at par, thirty-six cents in United States money. It is redeemable in gold in 1915—if not worn out before that time—yet, it is only worth twenty-three cents in gold today. This is difficult to understand until you learn that all the old obligations and mortgages given are payable in *pesos*, and do not specify "gold" as United States mortgages do, and so long as they can keep the value down they are paying off their debts with a depreciated currency on a par basis.

Chile has now \$25,000,000 in gold deposited in New York and London, out of reach for possible use for any other purpose than to enable her to "make good" in redeeming the paper money, and in reaching a gold basis in 1915. Many citizens of Chile doubt that she will "resume" at that date, and are making all obligations payable in "gold" *pesos*. Silver money is redeemable in gold. Chile has no national banks and the Government issues all the money. However, there are many banks, and branch banks of foreign banking houses. Every important country is represented, except the United States.

The Government of Chile ought to be able to go on a gold

THE COURT OF JUSTICE BUILDING, SANTIAGO, CHILE.

basis, except for her unwarranted expense in building up a navy. She has the largest income per capita of any country in the world. Chile has only 4,000,000 people, yet she receives \$50,000,000 a year from export—not import—duties, principally from the nitrate industry. She is extracting her wealth from other countries, not from her own people, as is done by the import duties of the United States.

There is no reason why Chile should have any foreign war, as all her boundary lines, the cause of South American wars, have been settled—especially the dangerous one with Argentina. Peru would like to get back her lost province, but she never will, as she is too poor to build a navy to contest the question with Chile.

Taxes are very low, and are for the most part assessed against real estate—the visible property—something on the order of the Henry George theory of the single tax. Merchandise, mining and manufacturing pay but very little.

There are no Government monopolies, as there are in other South American and European countries. The tariff, or import taxes, on merchandise and tobacco is very small, and nothing on most machinery, paper, books or anything that tends toward the development of the country. The liquor and beer tax is quite high and will be made higher to discourage so much drinking, which is the curse of the country. Up to twenty years ago Chile was a free trade country.

The Postal Department is admirably conducted on broad lines, and as the Government owns the railroads, the postal system is not run, as in the United States, for the benefit of the railroads. Postage is the same for letters as in the United States; newspapers and periodicals are free, as they should be in every country. Even Canada charges only one-half the rate charged by the United States for newspapers and periodicals. The Chilean parcels post is the most advanced and practical of any in the world. The rate charged for this class of matter is one-half that charged by the United States Government, and every postoffice is a custom house where duties can be paid on all merchandise received by mail from foreign countries. Montgomery Ward & Co., of Chicago, do a large mail order business in Chile. This firm distributes catalogues to the citi-

RAILWAY STATION, TALCAHUANO, CHILE.

zens of Chile, in Spanish. The Postal Department also guarantees delivery for a small fee, insures all such packages, and will handle the same C. O. D.; in other words, it does the express business of the country, which our Postal Department has handed over to the express monopoly of the United States. Notwithstanding its excellence in service, and the many conveniences it affords, the Postal Department of Chile pays a profit!

In one respect Chile is unfortunate—she had to build her own railroads, quickly to develop and protect her country, and she thereby created a national debt of \$125,000,000. This is not a very large debt, considering the fact that the railroads could be sold easily for that sum, wiping out the debt entirely. However, in building her own railroads she has saved her public lands, which is in contrast to the execrable policy of the United States Government in giving away the people's domain to the railroads, which now charge the public five times as much for carrying the mail as they do the express companies for the very same service, and often in the same car. The railroads here are operated for the people, but they are not well operated, because the employés are all on the Government

payroll, instead of in the employ of some well-operated corporation. The management of the railroads changes with the change of governmental officials, and the equipment of the roads is a veritable junk shop, being composed of a mixture of American, English, German, French and Spanish cars and locomotives that do not work well together. They have some of the best passenger and freight cars I have ever seen, and some of the poorest. One never knows when one is going to "get there," and might quite as well be on a sailing vessel.

The rates charged are much lower than in the United States or Europe, and the roads are operated at a big loss, to say nothing about the interest on the investment. The Government has 2,000 miles in operation and is building 2,000 miles more. The gauge varies from three feet three inches to five feet six inches. The standard gauge the world over, except in Russia, is four feet eight and one-half inches. There has been talk in Chile of the Government leasing the roads to some responsible syndicate that will standardize the whole system, and many of the people hope that the project will not end in talk. There are about eight hundred miles of well-conducted, privately-owned roads to mines and other industries. These roads charge a higher rate than the Government roads—about the same as in the United States—but they are run in a businesslike way and the service is worth more to the traveler and shipper.

My next topic is one on which I speak advisedly—the newspaper and publishing business. If the circulation of the blood in your body is poor, you are unhealthy; if the circulation of newspapers, periodicals and books is discouraged, made expensive, or hampered in any way, in any country, the body politic, moral and physical, becomes stagnant and unhealthy. The constitution of Chile, like that of the United States, declares for the freedom of the press. In Chile there is absolute freedom in the matter of printing anything, reading matter or advertisements, that the publisher may wish or his readers want. Not so in the United States! The Postmaster General daily violates the Constitution of the Union by his decision of what a publisher may print, and, if he wishes to, he rules a publication out of the mails, killing it—and the publisher's

work of a lifetime may be ruined. Of course, years afterward he may get his publication back into the mails, through a court decision, but it is too late—the subscribers and business are gone, and he must start all over again.

Again, the Chilean Government, believing in the education of the masses, encourages the circulation of all publications possible by charging no postage, and, of course, the readers receive the benefit. Again, Chile, believing in education, has no duty on white or blank paper of any kind for newspaper, periodical or book printing. The result is that white paper, made in the United States, is sold here for less than I pay for the paper on which my publications are printed, in Chicago. If the United States Postal Department was run on the same broad basis as that of Chile, the rate of postage on all classes

of matter could be cut in half and the postal deficit entirely eliminated. We publishers in the United States should at least be able to get our print paper at home as cheaply as they get it here, shipped, as it is, more than 10,000 miles by rail and water—and every reader in the United States would be benefited thereby.

The oldest paper in South America is *El Mercurio*, published now in four Chilean cities, with four separate offices, which are completely equipped from the United States, and are equal to our best plants, the mechanical managers being from the United States. In Santiago, as well as in the other cities where it is published, *El Mercurio* has the largest circulation, although there are other very enterprising and well-patronized publications. Forty per cent of the population of 4,000,000 can read, so there is a reading public of 1,600,000. In all, Chile has 330 publications—150 dailies, 150 weeklies, semi-weeklies and E. O. D.'s (every other day), and twenty monthlies. No person in Chile can vote unless he can read; and every man and boy is learning to read. Chile has double the reading population percentage of any other country in South America, and it is largely due to the liberal treatment of the press.

The most encouraging characteristic I observed about the Chileans was that no difference how well they do anything they say: "We can do that better." They are continually putting the standard of everything higher and trying to reach it—that is why they are so successful.

The United States Minister to Chile is Honorable Henry P. Fletcher of Pennsylvania. He has represented the United States as secretary of the legation at China and Portugal, and was appointed minister to Chile on account of his good record, without even applying for the post or knowing that he was being considered, until he read of his appointment in the press. The United States Government has at last realized the mistake of sending unfit men to South America, and that the damaging impression made thereby must be obliterated. Therefore, we are now sending our best diplomats, but we should pay them salaries that would induce them to remain in the service continuously.

The mines of Chile have been of great importance through-

out her history. The country contains gold, silver, copper, lead and iron as well as coal, nitrate and borates. The Caracoles silver mines, 10,000 feet above sea level, are famous for their production.

Many fortunes have been made from copper mining, and there are many establishments for working ores, and nearly all treat the ores by smelting, though the number of smelters is not sufficient to regulate the price of metal in the country. An American company, the Braden Copper Company (the Guggenheim interests) have large mines at Rancagua, some two hours by rail from Santiago, where 3,000 men are employed, and there are many hustling young men from Montana among them.

Chilean coal mining is an important industry today, this important product having been discovered at Lota, near the city of Concepcion in 1805. The property was bought by Don Matias Cousino, the history of whose family would alone make

BRINGING NOONTIME LUNCH FOR THE MINERS AT THE LOTA
COAL MINES, CHILE.

an interesting chapter. Don Matias established fire brick and tile works and a smelter, and later the present company was formed, all the shares being held by the members of the Cousino family. The strata of these great coal mines dip to the west, and a large part of the workings are below the Pacific Ocean. Today all the latest appliances are used, electric tram cars bringing the coal from the shafts, while the galleries are lighted by electricity. There are five pits, which produce from eight hundred to one thousand tons a day. There are about 6,000 men employed by the company, which also owns a great landed property. A church, hospital and free medical attention are provided for the men. It is said that the net profits of this concern are \$1,200,000 a year.

At Cebollar, on the *pampas* back of Antofagasta, are the largest borax deposits in South America, and they are operated by the same company that operates in Death Valley, California.

An aerial tramway brings down from the mountains dry moss, which is used for fuel.

During the period of Spanish rule in Chile the only currency of the country was gold dust, and in the southern part of Chile today part of the population gains a living by treating the gold-bearing sands of the rivers and streams by the old method of cradle and pan. Gold is also found in veins, inclosed in veins of copper or natural silver; but the work is for the most part done in a primitive manner.

A CORNER OF THE SPLENDID COUSINO
MANSION, LOTA, CHILE.

THE AGRICULTURAL MONUMENT, CONCEPCION,
CHILE.

In Chile there are numerous interesting things that might be described. Indeed, a useful volume might be written relative to this remarkable country and its vigorous and intelligent people; but in covering a vast continent like South America the observer can, obviously, treat no more than the most salient points of each country.

THE STRAITS AND FALKLAND ISLANDS

Straits discovered by Fernando de Magellan in 1519—Probably delayed the digging of the Panama Canal hundreds of years—The Straits a picturesque but dangerous passage from ocean to ocean—Punta Arenas, on the Straits, the world's farthest city south—Falkland Islands, twenty-two in number, English possessions—Area, 7,500 square miles—Population, 2,336, mostly Scotch and English—Chief industries, whaling and raising sheep.

CHAPTER XV.

THROUGH THE STRAITS.

FROM Concepcion, the third largest city of the Republic of Chile, half an hour by train brought us to the port of Talcahuano, where lies the Chilean naval base, a very impressive establishment of shops and dry docks. Soon after that we were on the broad breast of the Pacific out of sight of land, heading for the dreaded Straits of Magellan. In all the vast region about the southern tip of the South American continent the winds pour cold and strong from out the Antarctic Ocean and navigation is dangerous. It is a cold, rough world, the history of which is largely a story of shipwrecks.

As I stood on the *Oronsa's* deck, looking toward the coast of Chile, I thought of the thousands of human faces we had looked upon in our long journey from Panama, of the varied shades of nationalities and types, the numerous languages and dialects used in seeking expression, yet clearly we were all brothers. In proof of this I reflected that we had addressed numerous Indian guides and porters and waiters by such familiar and fraternal names as Jim and Joe and Jack, mainly because we found it impossible to pronounce their real names. Our experience in this respect was not unlike that of a delightful young woman of New York, who married a San Francisco man. Her first act in organizing her domestic establishment was the engaging of a Chinese cook.

"What's your name?" she asked, when the preliminaries had been settled.

"My name Hong Long Loo," said the Celestial, with much gravity.

"And I am Mrs. Harrington Richard Buckingham," said the new employer. "I am afraid I shall never be able to remember your name—it's so long. I shall call you John."

"All right," returned the Chinaman, with a suspicion of a smile. "Your namee too longee, too. I callee you Bill."

Our abridgment of Indian and South American names was hardly ever so misapplied as that, but sometimes quite as familiar.

From Puerto Montt south to Cape Pillar, the western entrance to the Straits of Magellan, there is a succession of islands through hundreds of miles, and between these islands and the mainland are numerous channels. All the country along the coast is wild and unexplored, and inhabited only by Indians.

As we approached Cape Pillar and the Straits, the strange story of the white man's discovery of this region came vividly to my mind.

After South America was discovered by Columbus, it was believed for twenty-five years that there was no passage around the southern end of the continent, so all communication with the west coast of South America was across the Isthmus of Panama. In 1519 Fernando de Magellan, a Portuguese, promised his King he would try to find a southern passage around the new world.

He sailed with a fleet of tiny ships, the largest of which was 130 tons, the smallest 60 tons, and after the usual mutiny, shipwreck, and other hardships that were the lot of explorers, reached a point of land at the eastern end of the Straits, which he named Cape Virgin, in honor of his patron saint. With only two of his four ships left, he entered the Straits, emerging from them into the Pacific Ocean on November 27th.

He lost his life in a fight with the Indians on an island, and only one small ship of his original fleet ever succeeded in returning to Portugal. The report of the finding of the passage into the Pacific Ocean was discredited, and it was not until seven years afterward that any other vessel passed through the Straits that have ever since borne the name of Magellan.

Spain, being in control of the coast, fortified the eastern end of the Straits, thereby intending to keep out all pirates and "foreigners." Had she succeeded in doing this the Panama Canal would have been dug, probably, two hundred years ago.

It was an age of monumental thievery, and that prince of pirates and master of navigation, Francis Drake, was given a commission by England to "purloin" from Spain the gold and silver they had wrested from the Indians after they had murdered them, and in 1578 Drake ran the blockade and got through the Straits from the east. When he reached the Pacific Ocean his ships were blown south and southeast, and finally when they could sail north they found themselves again at the eastern entrance of the Straits, and thus knew that they had rounded the southern end of South America in an open sea.

This was an epoch-making discovery, as it opened up the western coast of South and North America to the world. For this and the great amount of gold he forcibly took from other

TAKEN FROM DECK OF STEAMER IN STRAITS
OF MAGELLAN. ISLAND OF SOUTHERN
CROSS IN DISTANCE.

ships, Drake was "knighted." Of course, his discovery was a pure accident. However, the trip around Cape Horn is so long and dangerous that few boats ever attempt it. Unfortunately we passed through most of the Straits at night and could take but few photographs. I walked the deck until one o'clock in the morning, looking at the snow-clad cliffs and mountains by moonlight, and observed that at many places the "narrows" are only a hundred yards or so wide.

In this wild region the glaciers come down to the water's edge, and frequently ships go right up to them and cut ice sufficient to fill their cold storage chests. Here and there we could see fires on some of the receding shore points, and were reminded that it was from these fires, which are kept up all the time by the Indians, that the great island to the south of the Straits took its name—*Tierra del Fuego* (land of fire).

This great island, with the small islands and the country north of the Straits, forms the great sheep ranges of South America. Formerly this country, with the southern end of Argentina, was known as Patagonia, and will be found so marked on all school maps published twenty or more years ago.

The people put up no hay or shelter for their millions of sheep, allowing them to run out all winter, although the country is as far south as the southern end of Hudson Bay, in Canada, is north. Immense fortunes have been made in sheep ranching in this part of the world, as an instance of which I met a Chilean in Punta Arenas who owns a ranch which is as large as the whole State of Connecticut, and he is worth \$10,000,000 gold. Most of the sheep ranches are owned by Scotchmen and Englishmen, who came from Australia when the grazing lands of that country became overcrowded.

Possibly the lowest race of Indians in the world live on the barren west coast of the island of Tierra del Fuego. They are called the Yaghans. They go practically nude, and having no homes, push along the shore in "dugouts," carrying their families with them, and always keep a fire burning in the boats.

In the family's daily life the woman paddles the boat, while the man, crouched down in the stern, keeps a constant lookout for something to eat. They live on mussels, crabs, fish, or anything, dead or alive, that they can find. They go ashore at night, pull some seaweed or grass or rocks together for shelter, and keep their fire going. They have no matches, and this fire must never go out. In case of a storm on the water, the men throw the women

A YAGHAN INDIAN, LOWER
CHILE.

and children overboard and save themselves. They have no tribal relations or chiefs, and they kill the old women and deformed children. It is estimated that there are only about five hundred of them left. There are other Indian tribes inhabiting both the north and west portions of this cold and forbidding projecture of the South American continent.

A YAGHAN INDIAN GRASS HUT, ON THE STRAITS

There is really only one wild food beast in all this part of the earth—the *guanaco*, an ungainly, awkward-looking, hornless deer, or antelope. It has a long neck, like a camel, and hindquarters like a mule. It often feeds with the sheep, migrating with the seasons.

Punta Arenas is the last port we touched in Chile, and is the farthest south of any city in the world. It has a population of 13,000, although before the gold boom collapsed it must have had 15,000. There were many empty houses when we were there.

Punta Arenas is the port from which all the wool from this section is shipped, and it is very considerable, for over 2,500,000 sheep find food in southern Chile and her island of Tierra del Fuego, while there are 1,000,000 sheep in the southern end of Argentina, which also ships from this port.

These sheep grow splendid fleeces of wool, averaging about eight pounds to the fleece, and it is worth 20 cents a pound.



PUNTA ARENAS, ON THE STRAITS OF MAGELLAN, CHILE. THE FARTHEST SOUTH OF ANY TOWN IN THE WORLD.

Hence the wool crop of this port brings \$5,600,000 a year, and adding to this the sum received from frozen mutton, tallow and hides, this one Antarctic port has an income from sheep alone of \$10,000,000 a year—and it is a very sure crop. As we sailed away from this sheepland city we took our final look at Chile, and said good-by, perhaps forever.

After a rough voyage and numerous interesting sights, we

A STREET IN PUNTA ARENAS, CHILE.

came to the Falkland Islands, which are English possessions, and sailed into the beautiful harbor of Port Stanley.

The story of the Falkland Islands reads like a romance. Just about the time of the discovery of the Straits of Magellan a British exploration expedition located these islands, and the members of this expedition were no doubt the first white men to "see" them. No settlement was made at this time, but as was the custom in those days of exploration and discovery, a party went ashore, hoisted a flag, fired a salute, and claimed the land for their King (if they could hold it) and then sailed away. The English always took the precaution to make a record of their findings in latitude and longitude, and years afterward could prove it.

Next came the French—after the English had run them out of Canada—and they made a settlement, claiming the islands for the King of France. But England made them give up possession. Then came the Spanish, in the name of the United

A GUANACO, SUPPOSED TO BE THE LLAMA'S
ANCESTOR. A WILD, WARY ANIMAL
RANGING FROM THE EQUATOR
TO CAPE HORN.

Provinces of South America. They took the islands from England and held them until the Spanish murdered some sealers and whalers from the United States. The United States forces expelled the Spanish from the islands, then returned to Buenos Aires. The islands being unoccupied, England put in a claim of original discovery, and as Uncle Sam

GOING ASHORE ON LIGHTERS AT PORT STANLEY, FALKLAND
ISLANDS.

A CHURCH IN PORT STANLEY, FALKLAND ISLANDS.

did not contest the matter the islands have been under the domination of England ever since.

The Falkland group consists of twenty-two islands, on which sufficient grass grows, on 2,000,000 acres, to support 724,000, sheep, which are owned by thirty-nine different companies or individuals. No more sheep could find pasturage. The wool product of the islands sells for \$1,500,000 a year.

THE GOVERNOR'S RESIDENCE, FALKLAND ISLANDS.

THE JAIL, PORT STANLEY, FALKLAND ISLANDS.

The increase of flocks is 25 per cent each year and the deaths 10 per cent, hence 15 per cent must be killed and shipped or consumed at home. Mutton is 4 cents a pound, hence a considerable sum is realized from this source. They have no freezing plants, but a cannery is being established.

The population is 2,336, the death rate eight to the thousand per year, and the birth rate twenty-three to the thousand. The population is mostly Scotch and English.

TEN THOUSAND SHEEP IN ONE FLOCK, FALKLAND ISLANDS.

The best whaling waters in this part of the world lie off these islands and south to the frozen Antarctic country. Formerly the United States whalers (when we had ships on the ocean) came here every year; now the only whalers are from Norway. The only harbors are at these islands, and to use them the whalers must take out a British license, which is a source of considerable revenue to the crown.

Some seals are taken in this vicinity, but principally for the oil, as the fur is not very good. A company had just been licensed when we were there to kill and press the oil from that most wonderful bird, the penguin, which is very plentiful on the rocky islands. This bird cannot fly; it has a head like a bird, feathers almost like fur, its wings have scales on them, its legs are so short the feet seem to be attached to the body, it possesses a tail like a seal, and is very rich in fat. Why it should be called a waterfowl I am at loss to say.

It was a very cloudy, wet day when I visited their rookery and it was difficult to get good photographs. They peck at one when he gets too near them, and can put up quite a fight—in their clumsy way.

The Falkland Islands lie five hundred and fifty miles east of

PENGUINS IN THEIR ROOKERIES,
FALKLAND ISLANDS.

Punta Arenas, and we were that much out of our course. Few people or steamers go there, but I felt that some readers might care to know what these islands were like, and what the industries were of the inhabitants of this obscure quarter of the globe.

URUGUAY

Area, 72,210 square miles, or a little less than the area of Indiana and Kentucky combined—Population about 1,300,000—Chief resources, wheat, corn, oats, flax, fruits, vegetables and meat products—Total exports and imports about \$100,000,000 annually—Exports to United States (1911), \$1,613,736, imports from United States \$5,317,711—Miles of railway 1,500—Army, peace footing 8,000, war footing 36,000—Navy, war vessels of all classes 12, officers and men 600—Capital, Montevideo, population 300,000.

CHAPTER XVI.

SOUTH AMERICA'S BATTLE-GROUND.

AFTER leaving the Falkland Islands my first port was Montevideo, Uruguay, 1,000 miles to the north. Well do I remember the fine early fall (April, in South America) morning in which we sighted this hustling city of 300,000 population, built on the sloping ground of a point of land that forms a bay by extending out into the Rio de la Plata.

The river at this point is one hundred miles wide, but the water is of an average depth of only twenty-five feet, which does not permit the largest ocean-going vessels making this port to come up to the docks. The dock company, however, is spending \$12,000,000 improving the harbor.

We anchored about one mile from the wharf, after passing the shelter inside the breakwater sea wall, and were soon taken ashore in lighters. Everything reminded me of an Italian port—the air, sky, streets, buildings, smells and people—all were as if from Italy.

It was here that Giuseppe Garibaldi made his first appearance in practical, cut-throat politics. He later succeeded in Italy, and is famed as a hero; had he failed he would have gone down in history as a bloody anarchist! Garibaldi came to Uruguay, hired to kill the man who was then President of Argentina—but he never got the chance.

Montevideo has a larger percentage of Italians in her popu-

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VIEW IN HARBOR OF MONTEVIDEO, URUGUAY.

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lation than any other city in South America. The climate here is about the same as in northern Italy, and the general conditions attract the better class of emigrants from that overcrowded and poorly-fed country.

The Italians feel quite at home here and do better than in North America, South America being a more natural country for emigrants from Latin countries than the United States. Government, church, social conditions, products and climate suit them better. Here there is plenty to eat, work for everybody, and considerable social license.

On the evening of the day of my arrival in Montevideo I sailed for Buenos Aires, and spent two months in Argentina and Paraguay before returning to make an extended visit in Uruguay. There is one point on which I wish to caution my readers, and that is not to get Paraguay and Uruguay mixed, as they are opposites in nearly everything except the terminations of their names.

Paraguay is inland 1,000 miles; Uruguay is on the coast. Paraguay is run by the soldiers, who elect the President; Uruguay is Socialistic to a great extent, and the army and church have nothing to say in politics. Paraguay's dollar is worth 8 cents in gold; Uruguay's, \$1.03 in gold—the only

THE MUNICIPAL PALACE, MONTEVIDEO,
URUGUAY.

country in the world where the United States dollar is at a discount of 3 per cent. Paraguay has had but one great war in four hundred years; the people of Uruguay have fought everybody, including one another, all the time for nearly four hundred years.

Uruguay, the smallest of South American republics, for four centuries has been the public fighting-ground of Spain, Portugal, England, Argentina, Brazil and Paraguay. Whenever any of the above-mentioned countries wanted to pull off a fight in South America they usually pitched the ring in Uruguay—it was so convenient.

The armies lived off Uruguay and saved the crops and property at home. They never paid for anything they took or destroyed, and the natives of Uruguay had to fight much of the time to prevent all their cattle and provisions being stolen by the soldiers of some foreign country, who were chasing the soldiers of some other foreign country across this rich and fertile land. It didn't matter which side won or lost, the people of Uruguay always got the worst of it.

RAILWAY STATION, MONTEVIDEO, URUGUAY.

For three hundred years, from 1510 to 1810, Spain and Portugal were either fighting or "exchanging diplomatic notes" with each other about the location of the boundary line between their possessions in South America.

The territory now forming the Republic of Uruguay is so situated that it controls the trade of the Rio de la Plata and the interior of southern central South America. Buenos Aires would not now be the commercial capital, except for the old Indian wars.

Uruguay has no desert land and the rainfall is ample. The vegetation and climate are about the same as Virginia, Kentucky and Tennessee in the United States. The Atlantic Ocean to the south and east changes very little in temperature in a year, and as the prevailing winds blow from the ocean in the summer, and from the north and west—or from the tropics—in winter, Uruguay is equally a summer and winter resort.

The general elevation of the country is from 2,000 to 3,000 feet above sea level, and the country is drained by many small

rivers. Plenty of shade trees grow along the streams, furnishing sufficient wood for domestic purposes. The general climate makes artificial heat unnecessary for bodily comfort in the winter, so in the homes fires are used only for cooking; wood is the principal fuel, coal being very expensive.

The climate, soil and easy transportation by water made Uruguay a prize over which Brazil and Argentina have frequently fought, since the rule of Spain and Portugal has gone from the Southland forever.

The first attempted settlement on the east coast of South America was made by Spain in 1515, on an island at the junction of the Uruguay and Paraná Rivers. This island, which now belongs to Uruguay, was called Martin Garcia, having been named by Juan Diaz de Solis, who was sent out by Spain to investigate the worth of this new country, and determine what part of it she would let Portugal keep.

With ten men Solis went ashore, and in a short time one of the men returned carrying what arrows he couldn't pull out of his body as he ran; the remainder of the party did not come back, and those who had been left on the ship decided not to go out and fight the Indians in looking for the bodies of their comrades; instead, they hove anchor and returned to Spain.

Spain decided she did not want this particular section of South America, for none of the expeditions sent out could hold it against the warlike Indians who called it their home. For 162 years these Indians, known as the Charruas, held their own and beat back every advance made by white men into their territory.

The Charruas were better organized than any other race of Indians, and therefore more effective in warfare. They were experts with bow and arrow, slungshot, spear and club; were commanded by chiefs, and in battle obeyed orders implicitly, forming in columns and attacking in mass on command. They were nearly as far advanced in the art of war as the white man, and while at first they had neither horses nor guns, they soon took both from the Spaniards and learned to use them. They had the advantage of great courage, splendid physical development, and a complete knowledge of the country, combined with plenty of food and reinforcements when needed.

ALONG THE DOCKS, MONTEVIDEO, URUGUAY.

The Charruas lived in huts and were highly civilized—from the Indian point of view. In order to preserve the high physical standing of their race they killed all sickly or crippled children. They maintained their position until 1777, when the country had become settled by the Portuguese to the north and east, and by the Spanish to the west; the Jesuit priests had also sown discord for so long that it was impossible that there could be peace for the Charruas in this position, so they were driven back, but never conquered.

At this time the whole country was overrun with hundreds of thousands of wild horses and cattle—the multiplied product that had come from the stock that for many years had escaped when settlers had been massacred, and which had been allowed to roam at will by the Indians. Hunting for “big game” was good in Uruguay—with the Indians practically all gone.

The half-breed Spaniard from Argentina and the half-breed Portuguese from Brazil crowded over the borderland of this “open” territory after their own or any other person’s cattle they could “run a rope on,” and by and by the country was settled by as mongrel a Spanish-Portuguese-Indian breed as ever cut a throat or set fire to a shack. Life was cheap and fights were plenty.

This is the basic rural stock from which the present old families of Uruguay sprang. Do not expect too much of them

—you will not realize your expectation if you do. From their viewpoint they believe they have made wonderful improvement, considering how they started, and I admit that they are right.

Of course Spain claimed all of Uruguay and a lot of Brazil, but in 1680 Portugal sent some ships and soldiers from Rio de Janeiro to the mouth of the Rio de la Plata, and established a colony opposite Buenos Aires on the north side of the river, calling the town Colonia.

The Spanish colony in Argentina, not knowing but that this was perfectly satisfactory to their King, sent a detachment of soldiers over and took Colonia. When information of the capture reached Madrid notice was sent to withdraw the troops and give the settlement back to the Portuguese. For the ensuing one hundred years, except for short periods, Uruguay was a part of Brazil under the domination of Portugal.

Colonia was the first white settlement of any importance in Uruguay; today it is principally a pleasure resort for citizens of Buenos Aires. Argentina forbids bull-fighting, while Uruguay permits it, and Colonia has a bull ring that is principally patronized by "sports" from Buenos Aires—just across a river eighty miles wide.

One hundred miles east of Colonia existed the best natural harbor in the region, and in 1723 the Portuguese started a town

and fort there. The Spaniards of Argentina objected, and the Governor of Buenos Aires captured the town and fort, but when the home Government heard about it he had to give it back. Spain and Portugal were still on peaceable terms, but they had a hard time controlling the actions of their subjects in South America.

By 1777 the Spaniards had taken nearly all of Portugal's territory on the east coast up to the State of São Paulo, Brazil, and, to stop further aggressions, Portugal's diplomats agreed to make the permanent boundary between their possessions and those of Spain where the southern line of Brazil is now. This forever fixed the nationality of Uruguay as Spanish, and so it is to the present date.

Now we come to the point where Uruguay, which was always attached to Argentina for governmental purposes, secured, not only her freedom from Spain in the great South American emancipation from the mother country, but also secured her freedom from Argentina.

Under the treaty of 1777 Uruguay began to exist as a separate colony of Spain, just the same as other South American colonies. In 1810 Montevideo had a population of 7,500, mostly Spanish, which by 1910 had increased to 300,000 of mixed races. In 1807 it was Spain's chief fortified city on the east coast, and was captured by the British in a combined land and sea fight. Flushed with success the victorious army then tried to take Buenos Aires.

Here England was completely whipped for the first and last time by the Argentinians; her entire army and navy in this part of the world were captured. On condition that the British forces be withdrawn from Argentina and Uruguay, they were allowed to depart—and they never came back.

Had England been successful in this engagement the map of the world would have been changed. The money, enterprise and emigration that has gone from Great Britain to Africa, Australia and elsewhere would have gone to South America, which is a thousand per cent better country than Africa—in climate, soil and products. This surrender of an English officer left South America to the Latin races instead of turning it over to English-speaking people. The United States and

APPROACH TO EXPOSITION BUILDING, MONTEVIDEO, URUGUAY.

Argentina are the only two countries of the Western Hemisphere that have whipped Great Britain.

Spain really had nothing to do with driving the English out of South America; it was the natives of Argentina and Uruguay, independent of Spanish help, who saved the day. Then they said to themselves: If Spain cannot protect us from foreign invasion, what use is the mother country? Having decided that it was "no good" they struck for independence. Argentina set up business for herself on May 25, 1810, and on May 18, 1811, Uruguay followed her example.

The George Washington of Uruguay is José Artigas, who was a captain of guerrilla cavalry. He organized the *gauchos* and drove the Spanish Government out of Montevideo—it never had any hold in the country districts. Artigas never tried to be President, but for awhile he directed the fight that prevented Argentina and Brazil from capturing his little republic.

Finally he was driven into exile by the combined efforts of

the two great republics, and he died in Paraguay in 1850. Later his remains were exhumed and taken to Montevideo, where they rest in the national pantheon. On the sarcophagus is inscribed this line: "Artigas, Founder of the Uruguayan Nation."

In 1820 Uruguay was occupied and claimed by Brazil, in 1825 by Argentina, and in 1830 by herself, in which year she elected her first President. By 1840 Uruguay was quite prosperous, for during that year nine hundred ocean-going ships entered Montevideo harbor; many of them flew the United States flag, now never seen on the ocean except on a warship or occasional private yacht!

Rosas, the Argentinian Dictator, took a hand in the politics of Uruguay and kept the country in a state of turmoil for years; but for trouble at home in Argentina, Rosas possibly would have succeeded in annexing Uruguay to Argentina. The end came in 1851, when he was defeated by the combined armies of Brazil, Uruguay and the revolutionists of Argentina. The Dictator was driven from power and Uruguay was left the "buffer State" between Brazil and Argentina, which it continues to be.

In 1860 the cattle in Uruguay numbered over 5,000,000; sheep, 2,000,000; horses, 1,000,000, while the population had doubled in ten years. Things were too prosperous, so the two political parties—the *blancos* (whites) and the *colorados* (every person not identified with the *blancos*) got busy and began to fight for the various political offices.

There never was and never has been any particular difference in principle between the parties. However, most of the *blancos* live in the cities, while the *colorados* live in the country. From our viewpoint both are corrupt and dishonest; but our views on honesty and morals in general are different from a South American's.

Since 1860 the real business men of the republic have largely withdrawn from political strife and discord and have permitted the politicians to struggle over the offices. The result has been that business has gone steadily ahead, despite the fact that from 1860 to 1902 the country has had twenty-four Presidents, of whom five or six were assassinated. The murderer of one President got two years—most of the other assassins got good political positions.

However, conditions are much better in Uruguay now; the people are more prosperous, and with prosperity comes a contentment that puts an end to political strife.

CHAPTER XVII.

PRESENT-DAY URUGUAY.

“YES, I elected Dr. Claudio Williman to act as President in my place for the past four years, as our constitution forbids the election of a President to succeed himself.

“I spent the four years in Europe, and have just returned and again elected myself President of Uruguay. When I have served out this term I will elect some one for the next and go to your country, the United States of North America, for a long visit. I will be President of Uruguay every other term as long as I live!”

Thus President Batlle, who is practically Dictator of Uruguay, spoke to me when I congratulated him on his re-election as President. He said he was the best man for the office, and I am not sure but that he is right. I was reminded of the Irishman at the wedding who inquired of a man taking a prominent part in the festivities: “An’ who are you?” The reply was: “I am the best man!” Pat remarked, after he had been ejected from the house — “And, begorry, he was!”

It may seem an unusual thing to say, but it is nevertheless a fact, that the best man for President of any South American republic is the man who can hold down the job.

THE PRESIDENT’S PALACE, MONTEVIDEO,
URUGUAY.

LOOKING DOWN A PRINCIPAL STREET OF MONTEVIDEO, URUGUAY.

President Batlle, who is a big, six-foot, two-hundred-pound, determined man, was exceedingly frank in all he said to me. He is a pronounced Socialist, and states plainly that as rapidly as he can secure the necessary changes in the constitution he will give Uruguay a purely Socialistic government.

While in Europe, during the previous four years, he had associated with the most advanced thinkers along this line, and as he has the courage of his convictions, he will not permit any one or any thing to stop him from putting his plan into operation. He is admitted by all to be personally honest, but some think him visionary. He is surrounded by a class of men who pretend to believe in his theories, but who are really only after the offices and slices of the big melons to be cut when the Government begins buying up the various corporations and business concerns of the country, to put them under Government ownership.

President Batlle told me he proposed to make a Government monopoly out of every industry of any importance in the republic, and that he would begin with the meat-packing industry. I asked him if he thought the ranchers and farmers would be satisfied with the prices the Government would pay for their cattle, hogs and sheep, and his reply was that "they would have to be satisfied, as they would be dealing with themselves and would get all the profit."

"Why, do you know, Mr. Boyce," he said, "there are over 30,000,000 head of cattle, sheep, horses, hogs, mules and goats in this re-

A STREET SCENE AND THEATER IN MONTEVIDEO, URUGUAY.

public; and I do not propose to allow this, the chief source of income of my people, to be subject to a monopoly like you have in the United States in your Beef Trust. Your Chicago packers tried to buy out our local concerns, but I told them that they would not be allowed to operate; so they went on to Argentina."

"How does your excellency intend to handle the grain and produce of the country, on a Government monopoly basis?" I asked. His reply was that he proposed first to take over the railroads, as they were necessary in handling the products and supplies of the country; and that the Government would own the storehouses or elevators, and also the market-houses. Thus everything would be handled without the profit demanded by private capital, and forced from the public by combinations and "gentlemen's agreements."

I asked him who would establish the price for cattle, grain and produce. He replied: "The markets of the world." I suggested that the trusts make the markets of the world, and his reply was: "Then our people will get the profits—not the trusts."

There are 1,500 miles of English-built and operated railroads in Uruguay, and the peace of the country is largely due to the facilities the Government has, by reason of these rails, to reach quickly with troops any point where there might be a local revolution. As the Government has guaranteed all the bonds of the railroads it would be but a short step from Government guarantee to Government ownership. I expect this change will soon be made.

The population of Uruguay is about 1,300,000; it has an area of 72,210 square miles, and a coast line of 625 miles. Geographically it is located between the thirtieth and thirty-fifth parallels of latitude south of the equator. The conditions are ideal for a thorough trial of Socialism, and the results will be watched with great interest by the world.

I inquired of President Batlle what lines of business he had actually tried out on the basis of Government ownership, and he enumerated several local institutions. The one with a universal application to all countries, however, is the insurance business, which the Government of Uruguay took over by buy-

VIEW IN A PARK, MONTEVIDEO, URUGUAY.

ing out the established agencies of old line companies, and giving employment to as many of the people working in the offices before, as possible. Some people in Uruguay complain that the Government has retained too many of the old employés.

President Batlle claimed that he was copying the American railroad insurance idea, and later expected to have everybody insured—the same as they are in Germany, and as England plans to do by a law recently passed. Uruguay is handling the fire and accident line of insurance as well as the life and old age.

President Batlle called my attention to the fact that the cheapest insurance in the United States, which is just as good as any other, is on the mutual plan. In my opinion, if there is one semi-business institution that should be operated by the Governments of all countries, it is insurance.

Why the American people have stood for being browbeaten and skinned by the insurance companies all these years is difficult to understand. How many thousands of people have paid on fire, life and accident policies for years and years, only to find when the fire comes, or life is nearly ended, that through dishonesty or failure their policy is worthless? It would cost less and be absolutely safe if insurance were done

by the State or National Government. Insurance, like banking, should be backed by the Government.

The money of Uruguay is issued by the Bank of the Republic—owned by the Government—so every dollar in circulation is issued by the Government. The paper money is guaranteed to be redeemed at face value any time with gold—and it is; you may have gold or paper, just as you wish at any bank. The gold dollar is worth \$1.03 in United States coin, and it really makes an American feel cheap to find a dollar in the wide world worth more than our own.

The paid-up capital of the Government bank is \$11,000,000, while the branches of foreign banks (mostly English) located in Montevideo and the country towns, represent over \$34,000,000. The whole country is well supplied with capital.

The ruling rate of interest is 12 per cent, but the Government can borrow all it wants at 5 per cent. In view of this great difference, President Batlle said to me: "Why should our people have to pay 12 per cent when the Government can get loans at 5 per cent, or over 100 per cent less?" I did not answer his question.

The President pointed out with justified pride the results of Government ownership of public utilities, such as the telegraph, telephone, water, sewerage and gas, and said that the Government was not granting any more franchises for electric light and street cars.

While I was in Montevideo the employés of the privately-owned street car line struck and closed down the entire system. In addition they forbade any one, working for wages or salary for any concern, going to work for three days. The whole city was closed up tight. I asked President Batlle why he permitted this when he could have stopped it. He replied: "To let the people see how strong they, the people, are; Socialism is only the people acting for themselves."

The President was quite proud of the fact that under his administration the expenses of the Government had never exceeded the income. This is the only exception to the opposite procedure in South America that I know of. It was during his former administration that the rate of interest for Government loans was reduced from 10 per cent to 5 per cent. No wonder

he feels certain the people will elect him President every chance they get.

The exports and imports are nearly \$50,000,000 a year each way. With \$100,000,000 to handle, and that cared for as carefully, if not more so, than is the Government's money of the United States, Uruguay is pretty well off.

One thing that is difficult to understand is how Socialism has secured such a hold on the minds of the uneducated people of Uruguay; for it must be admitted that in the matter of general education few countries in South America are so backward. The low standard of education in the country districts may be accounted for by the people being so scattered that it is difficult to locate a school that would accommodate many of the children. In riding over the country my observation was that not one in five of the people I met could read or write.

The Government has recently established a university which has at present eighty professors and over 800 students.

A RURAL FAMILY IN URUGUAY.

The best sign I observed for the future of Uruguay is that the young men are studying agriculture, horticulture and cattle raising, and not to become doctors of law, medicine, and politics, as is the case in Argentina and Chile.

Uruguay is the best all-round country for everything in South America. Wheat, corn, oats, flax, fruits and vegetables of all kinds grow any place, and in many localities two crops of garden vegetables are produced each year.

Owing to the well-drained country and temperate climate, cattle, sheep and horses are particularly free from disease and feed outdoors the year round.

Over 1,000,000 head of cattle are killed in Uruguay annually by the Liebig's Extract of Meat Company. This concern, although originally a German corporation, is now controlled by English capital. President Batlle told me he had about completed a plan for taking over this company's business in Uruguay and operating it as a State monopoly, with which he would include the cold storage plants, potted beef, and potted tongue concerns.

The United States has less than 10 per cent of the foreign trade with Uruguay, and this is the American business man's fault. However, for some years back we have been sending better men to represent our country and the result will be apparent soon.

General O'Brien, as our representative to Uruguay, was an able and competent minister, but he soon saw an opportunity to make money in building a railroad with American capital, engineers and material, and is pushing his road to completion. No doubt the Government will take the road over when it is completed, but in the meantime it makes an outlet for American capital, material and labor.

Minister Morgan, a very able representative of Uncle Sam, succeeded General O'Brien, but he has recently been appointed ambassador to Brazil, which is considered quite a promotion. While in Uruguay Mr. Morgan was the most popular of foreign representatives, and in street parades the Stars and Stripes were frequently carried in his honor, and three cheers were always given when the parades passed the United States legation building. The present minister from the United States to

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OUT IN THE CATTLE COUNTRY, URUGUAY.

Uruguay is Nicolay Grevstad. He is an Illinois man, having formerly been editor-in-chief of the *Daily Skandinaven* of Chicago.

While the Uruguayan Congress elects the President of the republic, I imagine it would be rather difficult for a man to secure a seat in the Congress if he were not an adherent of President Batlle.

I asked the President if he intended to separate the Church from the State and he replied: "Our constitution recognizes the Catholic Church, but I am now having the constitution

THE CATHEDRAL, MONTEVIDEO, URUGUAY.

changed so we can drop any church, Catholic or Protestant, from having any place in our Government affairs. I do not believe in churches."

I was told that President Batlle refuses to allow any officer of the army or navy to go into any church with his uniform on, or any employé of the Government to attend any religious function as a representative of the Government.

A great reform advocated by the President is the legal recognition of illegitimate children in Uruguay. Thirty-three

per cent of the children born there are in this class, and at present they have no legal standing.

If I have succeeded in awakening the reader's interest in Uruguay, so that he or she will watch the results of the experiment being tried in that country, I will have accomplished something to repay me for the many miles of travel and days of hard work required to gain the information given here.

Socialism, like Masonry, has many degrees. Some people never get beyond the Blue Lodge, others take the thirty-two degrees, and a very few reach the thirty-third. Watch Uruguay! How long will her dollar be worth \$1.03 in United States gold? That is an interesting question and worth keeping in mind.

ARGENTINA

Area, 1,135,840 square miles, or about five and a half times as large as France, or nearly one-third the size of the entire United States—Extends from the summit of the Andes to the Atlantic Ocean and from latitude 22 degrees south to 56 degrees south—Population (1911), about 7,500,000, including 30,000 Indians—Chief products, wheat, corn, sheep, wool, cattle, wine, meats—Total exports (1910), \$359,584,000; imports, \$339,459,000—Exports to United States (1911), \$29,090,732; imports from United States, \$42,918,511—Miles of railway, 15,000, railroad investment approximately \$450,000,000—Army, peace footing, 20,000, war footing, 200,000; navy, 30 ships, 5,000 officers and men—Capital, Buenos Aires, population, 1,250,000.

CHAPTER XVIII.

FIRST IMPRESSIONS OF ARGENTINA.

A LITTLE girl from a country town, once upon a time, came to Chicago with her father to see the city. In the course of their wanderings up and down the streets, lined with towering buildings, they came to the corner of State and Madison streets, where more people pass in one day than at any other street corner in the world. After standing there for what seemed a long time to the little maid she said: "Papa, let's sit down till the crowd goes by."

After four months on the

UNITED STATES LEGATION, BUENOS AIRES.

West Coast of South America, I could almost believe I was back in Chicago at the corner of State and Madison streets when I finally stood in the busy section of Buenos Aires. But one glance was sufficient to tell me the throng was a crowd that surged to and fro all day—so I didn't stop to wait for it to go by.

Buenos Aires is one of the most wonderful cities in the world—and I have "been about considerable" and have seen some other wonderful cities. In this chapter I can do no more than set down some of my first impressions of this magnificent city. Of Argentina itself there needs must be some rather extended paragraphs, for Argentina is a very splendid country, and it is of mighty moment in the world's evolution, and of supreme importance to the people of the United States.

You perhaps remember when we were in Chicago together at the World's Fair, how the hustle and push of the people who dwell in the Windy City impressed us? Well, Buenos Aires is just like Chicago.

You remember when we were in New York together at the horse show, and took in Broadway, Wall street, Fifth avenue, the big restaurants, hotels and theaters; also saw the resi-

dences, banks and office buildings of the billionaires? Well, Buenos Aires is just like New York in that way.

Again, you remember, perhaps, when we were in Berlin, Germany, and we remarked about the wonderful growth and improvement since the last time we were there; how clean the streets were—how solid and substantial the buildings looked, and how well kept the parks were? Well, Buenos Aires looks like Berlin.

You remember what a difference we noticed between the people of Berlin and Paris; how in Paris everybody seemed to live only for today, how gay, well-dressed and light-hearted they were; how everybody seemed to be sitting on the sidewalk, outside some restaurant, under an awning, smoking cigarettes and having coffee or soft drinks; what big hats the handsome women wore; how the boulevards and avenues were crowded with automobiles and carriages, and everybody went to the races? Well, that's the way they do in Buenos Aires.

You remember when we went to Washington to try to get Jim that appointment, how the Capitol and public buildings impressed us with the wealth and solidity of the Government; how beautiful, wide Pennsylvania avenue made us wish that

THE CUSTOM HOUSE, BUENOS AIRES.

all streets were like it; how important our Congressman seemed, how busy he appeared, and how he shook hands with us and inquired about "the folks at home?" Well, Buenos Aires is the capital of a country as big as all of the United States east of the Mississippi River, and one feels as though he were in Washington—only the city is as big as Chicago at the time of the World's Fair, having 1,250,000 population.

To revert for a moment, I will mention that the approach to this great city is very impressive. Leaving Montevideo, Uruguay, having arrived there from the Falkland Islands, it took all night to cross the Rio de la Plata—think of a river over one hundred miles wide! The big side-wheeler boat was packed, every berth being taken. At seven o'clock in the morning we were within one mile of the docks of Buenos Aires, and as we drew near, my Peruvian photographer, who had never seen a big city, forgot his camera and stood with mouth wide open, completely forgetting to take a panorama of the city. However,

it was a trifle too early in the morning to get a good photograph.

Through the request of the American legation at Buenos Aires our baggage, photographic material and eight cameras were admitted by the customs officials without our trunks being opened.

When my photographer from the West Coast saw a new thirteen-story building, partly finished, he collapsed and thought he was dreaming or couldn't see straight—and when we told him there was a forty-five-story building in New York and a thirty-story structure in Chicago, he—well, you can fancy what he thought of our veracity! I admit that I was somewhat surprised myself when I saw the towering structures of Buenos Aires, as I had expected nothing of the sort.

We had cabled for rooms at the Plaza Hotel, and on arrival there I was again surprised; the hotel, finished two years ago, is owned by the Ritz-Carleton Company of London, England, which owns about twenty big hotels the world over, one even in Pittsburgh, Pa.

Here I found a clerk from the Carleton Hotel in London, and discovered that the prices asked for rooms would make a New York hotel clerk blush—and that would be “going some,” one must admit. *Thirty dollars a day for three small rooms and bath, meals extra, was the price charged me.* I learned afterward that I had been given a discount of twenty-five per cent in the bargain, for the reason that I was a “newspaper man.” I noted that a hat, which would cost five dollars in the United States, would cost seventeen dollars in Buenos Aires, and that Havana cigars were from sixty cents to one dollar each.

After breakfast the first morning, finding I had some money left, I took a cab at two dollars an hour—the cheapest thing in the city—and looked the place over for several hours. It was Sunday morning and the streets were so deserted I got a good clear look at everything on the outside. About noon, however, the people began to come out and they came in throngs.

It was April, but April in South America is equal to October in North America. Buenos Aires is situated at latitude 35 degrees south, but owing to the Atlantic Ocean the temperature does not change much. It seldom gets colder than 51 degrees above zero in the winter, nor hotter than 80 in the summer. The air is fine (Buenos Aires is Spanish for “good airs”), and the sky is nearly always clear.

It occurred to me that inasmuch as Sunday was the big weekly holiday and everybody was on pleasure bent, I would have an opportunity to see how the people of Buenos Aires amused themselves.

One thing I was pleased to observe—there was no drinking. No liquor is sold in this city on Sunday or any holiday—and there are twenty church holidays during the year. The nationalities are represented as follows: First, Spanish; second, Italian; third, English; fourth, German. There are only five hun-

dred Americans in the entire republic. The amusements are much the same as in any great city.

Driving through Palermo Park, we came to a handsome building, and my *cochero* (cabby) pointed it out as the *Palais de Glace* (the Palace of Ice), and then I realized how very up-to-date the Buenos Aireans really are. Here, where it never freezes and nature never forms ice, they make it electrically.

It looked odd to see skates for sale in the windows of the hardware stores, considering the climate. The ice skating rink covered half an acre, and while watching the people circling round and cutting figure eights, all muffled up in sweaters and tam-o'-shanters, one could almost believe he was at home, or up in Canada in the winter, watching the healthful winter sports on the ice.

The Japanese Gardens are near the Ice Palace, and they resemble a miniature "Coney Island," "Midway," or "Great White Way," being managed by a German who was at one time an assistant manager of the "White City" in Chicago. Here one can ride on a scenic railway, take a flight in a stationary airship, shoot the chutes, bump the bumps, or have one's fortune told, just as in the amusement parks of the United States.

I went into the big open-air hippodrome, or theater, in the middle of the gardens, and saw a very good circus. The animals, be-spangled performers and sawdust were all there, but I missed the funny clowns and small boy peddling peanuts and pink lemonade; without these adjuncts a circus is not complete to a North American.

The Zoölogical Park is a very popular place on Sundays. One pays five cents to enter it, and near the

MINIATURE RAILWAY IN ZOOLOGICAL PARK, BUENOS AIRES.

entrance is the starting station of a miniature railway on which, for an additional five cents, you may ride all around and through the park. One car will seat eight persons, and I discovered a family consisting of father, mother and fourteen children occupying two entire cars. Rooseveltian families are not unusual in Argentina, and are very "handy" in settling up a new country.

The Zoölogical Park is a Government institution, and the money received from entrance fees and riding on the miniature railway just about pays the expenses of maintenance.

I stopped at a dancing pavilion hoping to see the

tango, a famous dance of the republic, but was disappointed, as they only dance it now in the country towns. It is something like the Apache waltz, so popular on the vaudeville stage of the United States. The *tango* is always put on in an inclosed space, and the men are required to leave their pistols

and knives at the entrance before they go on the floor, as it intensely excites the dancers, and often ends in a free-for-all fight, and at some of these parties three or four have been killed.

FRONT VIEW OF THE JOCKEY CLUB,
BUENOS AIRES.

A ROW OF AUTOMOBILES OUTSIDE OF RACE
TRACK, BUENOS AIRES.

SCENES AT THE JOCKEY CLUB RACES, BUENOS AIRES.

TYPES OF BUENOS AIRES PEOPLE LEAVING THE CLUB.

The people of Buenos Aires and Argentina are enthusiastic lovers of horse-racing. It is really the national sport, which is very natural in a country that raises millions of horses and cattle. Through Mr. Bliss, the *chargé d'affaires* of the United States legation, I had received from the president of the Jockey Club a card—not only to the social club in the city, but one entitling me to the privileges of a member on the race course.

This track is one of the finest in any country, and the club house on the grounds and the grandstands are handsome buildings, being well constructed of stone, concrete and tile. There were about 18,000 people at the races on the day I attended, some with happy faces and a roll of money in their "jeans," others with a dejected air and their hands sunk deep into their empty pockets, hunting for a possible last nickel to pay their trolley fare back to the city.

I arrived in time to see the principal race of the day, the purse for the winner being \$8,000. The race was a good one from start to finish, and the crowd was wildly enthusiastic. The people were orderly and not "sporty" looking. The

ladies were handsome and elegantly gowned—much the same as you would see at the Paris races. The betting is on the Paris Mutuel plan, there being no “bookies.” Ninety per cent of the bets are paid to the winners and ten per cent to the Government; the races are said to be “on the square.”

I dropped into a vaudeville theater one evening, where the acts were in French, Spanish and Italian. One female performer gave me a thrill, for she imitated cleverly our own Yankee Doodle Dandy—George Cohan. When an actor did not please, the audience barked like dogs, instead of hissing and

MR. BOYCE LEAVING THE JOCKEY CLUB RACES IN
BUENOS AIRES.

cat-calling as American audiences sometimes do. It sounded like a dog show.

Some of the fashionable restaurants in Buenos Aires subdue the lights at the end of each course, and while you “keep your hand on your pocketbook” you can watch a moving picture show at the end of the room. The precaution of hanging onto your pocketbook is purely unnecessary, for when you have paid your check there is nothing left in your purse, and they might as well take its contents one way as another.

In most Latin-American countries bull-fighting and cock-

fighting are the principal sports, but Argentina forbids them. Since Rugby football was introduced into the country by my friend, Mr. Edward T. Mulhall, the proprietor of two daily newspapers in Buenos Aires, it has become a national game, being played all over the republic.

In closing this introductory chapter on Argentina, I would like to relate a bit of picturesque history that was told me by the captain of the ship on which I came from Montevideo to Buenos Aires. It ran as follows:

Fifty years ago an American named Captain Smylie carried on a coast trade with his schooner, the *Golden Rod*, between the Falkland Islands and Montevideo, and many stories are told of this old pirate's adventures and depredations. He always put into Rio Negro, Argentina, for provisions and water on his runs up and down the coast, and he and the Governor of Rio Negro became great cronies. One night they quarreled over a division of spoils from a wrecked whaling vessel, and there was a free fight between the Governor and his soldiers on one side and Captain Smylie and his men on the other. The American and his men were badly beaten, being greatly outnumbered, and Smylie was lashed to a post in the middle of the Plaza and beaten with the flat of the Governor's sword until the blood ran. His men were all put in jail, and he himself put aboard his ship in a helpless condition. In a few days his men were released and the Governor gave Smylie orders never to put into Rio Negro again. Smylie had an old cannon on his forward deck, and before leaving port managed to put a few holes through the Governor's house. For many months Captain Smylie heeded the Governor's warning and did not go near his port, but all the time he was planning revenge. Finally one morning he appeared in Rio Negro with the *Golden Rod*, and sent a message to the Governor begging that he would let bygones be bygones, and asking him to come out to the ship and accept as a present some fine pictures and other things he had recently taken from a wrecked ship.

The Governor accepted the invitation, and went unaccompanied to the ship. Captain Smylie greeted him at the gangway with a glad (right) hand and with the left grabbed him by

the throat and sang out to his men to hoist anchor and get away. He turned to the Governor and in a voice quivering with passion cried: "I've got you at last, you hound! Got you under the American flag, and as I am the only American officer in these parts I'll attend to your punishment myself! Get down into the galley and clean the dishes! You'll sail with me, my hearty, to Cape Horn and back, and you will serve as my *moso* (servant). If you do your work well I'll land you back in Rio Negro a better man in five or six months."

The Governor had no choice but to submit, and the story goes that his duties were made so arduous and mean that he sickened and died before he reached Cape Horn.

CHAPTER XIX.

ARGENTINA'S NATIONAL AND COMMERCIAL CAPITAL.

A WELL-KNOWN Federal official was strolling down a certain celebrated avenue of the capital of the United States when he encountered a very small boy who was crying bitterly.

"What is the matter with that child?" demanded the official of the woman who had the small boy in charge. "Is he ill?"

"He ain't exactly ill," replied the woman, "but, between you and me, sir, no stomach ain't goin' to stand fourteen doughnuts."

Similarly, I confess, that it rather strained the mentality to attempt the assimilation of Buenos Aires in the quantities given

us. Buenos Aires is rich in its constituent elements and "richness" is always cloying.

Buenos Aires is the capital of the Argentine Republic, and it may be called the commercial capital of South America. It exports more wheat and chilled meat than New York; publishes more statistics and educational works than Boston; receives and distributes more immigrants than Chicago; has the largest and handsomest opera house in the world; has a death rate lower than any big city in the United States; has the climate of California, and is practically a sealed book to any North American who has never been there.

Big battleships and ocean greyhounds cannot come up the Rio de la Plata to Buenos Aires. Notwithstanding its enormous exports, this city is a river port. But in that same disadvantage lies its greatest advantage and protection, and its superiority over any great exporting metropolis elsewhere. The Rio de la Plata varies in width from thirty to one hundred miles. It has a roomy channel, but its depth—only twenty-three feet—will not permit deep-draft vessels an approach to the city. Thus it can never be taken by a modern navy, and has

THE GREAT COLON THEATER, OCCUPYING AN ENTIRE SQUARE, BUENOS AIRES, ARGENTINA.

ANOTHER VIEW OF THE GREAT COLON THEATER, BUENOS AIRES.

A new congressional or capitol building, occupying four complete blocks, is almost completed. Words will not describe the magnificence of this structure. The new Colon theater—the grand opera house—takes up an entire square, and was erected by funds realized from the issuing of bonds by the city. The new School of Medicine, a library building, with here and there a modern skyscraper were all pushing their heads upward.

All of the material used in construction has to be imported from abroad, the steel, lumber, and some cement coming from the United States, together with tools and machinery. Considerable more would come from Uncle Sam's domain if we would only try to please our possible customers, pack and ship for export and learn to talk Spanish. Terms are good, and credit sound in Buenos Aires.

I found the streets uncomfortably crowded at all times.

The sidewalks are fearfully, and to the stranger, dangerously narrow, being only from three to four feet in width. The whizzing, clanging electric cars, often wider than the street space allotted to them, run on tracks about a foot from the curbstone, so that a passenger may mount from the pavement.

A mother and two daughters, when out shopping, walk along Indian file, so they may pass pedestrians from the opposite direction; the younger daughter first, her sister following, while the watchful mother brings up the rear. Buenos Aires is

THE SCHOOL OF MEDICINE, BUENOS AIRES.

not a quiet city, although no streets are paved with cobblestones, all being laid with wood or asphalt. The continuous, mixed-up, and badly-handled traffic contributes in no small degree to the tumult, as do the gongs of the cars, the shouts of the "cabbies" and the yells of the newsboys.

The shop windows are very attractive and seem to combine all that is best in American, English or French products and styles. When one stops on the sidewalk to look into a window persons passing by have to take to the street, as only two people

THE AVENIDA DE MAYO, BUENOS AIRES.

can stand abreast. The narrow streets, however, have two advantages—they cost little to maintain and they afford shade; furthermore, they make such high buildings as are seen in New York and Chicago impossible, thus spreading out the city.

I observed a very curious thing about the people and their choice of streets when shopping. Not long since the municipality tore down several valuable buildings and opened a wide street, the *Avenida de Mayo*, in the

A PRIVATE RESIDENCE IN BUENOS AIRES.

center of the city, planting trees along its sides, from *Plaza de Mayo*, the principal square, to the site of the new congressional building, the same as Pennsylvania avenue in Washington, D. C., only much better improved. Its sidewalks are wide, roomy, and well-paved, the roadway is asphalted and there are shelter islands for timid crossers. It is an ideal street for shops, stores and general promenade, but the people will not shop on it, and it is only used by strangers for promenades, while Florida avenue, a much narrower street, with smaller houses, stores and sidewalks, is so crowded during the day that by police regulations all traffic vehicles are

excluded from five p. m. to seven-thirty p. m., there being no street cars on this thoroughfare.

In the preceding chapter I mentioned the matter of the temperance of the people and the absence of drunkenness, but there are many saloons and restaurants all over the city. They are well patronized, yet drunkenness is scarcely known. If you see an intoxicated man, it is a foregone conclusion that he is a foreigner; you have three guesses as to his nationality and you

VIEW OF THE PLAZA VICTORIA AND

cannot lose—first, English; second, German; third, American.

Notwithstanding the excellent street railway system in Buenos Aires the present congestion of traffic and lack of transportation are serious problems for both the people and the State. The tramway of the city is under control of one gigantic corporation, called the Anglo-Argentine Tramway Company, an English company with a paid-up capital of \$85,000,000 gold.

Recently the tramway company and a steam railroad com-

pany acquired a concession to construct tunnels and subways under the city. Work has already begun on this project, and in three years, six of the crowded thoroughfares will have no surface cars on them at all. In order to get their concession they had to vacate some of the congested streets of surface cars—not a bad trade for the city. How many of our aldermen would think of forcing a corporation to do anything for the people? The fare is five cents, United States money,

AVENIDA DE MAYO, BUENOS AIRES.

and the company pays twelve per cent dividends.

There are thousands of automobiles, but most of them are privately owned. The meters on the motor cars for hire here run as fast as in New York, where it costs four dollars an hour "to ride" in a motor taxi when it is "dead." There are also thousands of handsome turnouts, horses and carriages being seen everywhere, and especially in the afternoons in the parks and on the boulevards "when the world and his girl take a

ride." The country roads are impossible for motor cars, hence the horse is still king in Argentina.

The native is perhaps the most luxurious spendthrift in the world—and he has the price. His father, as an immigrant, made little money, but the property he acquired advanced in value rapidly while he skimmed and saved. The son, born in this country, receives an education second to none; his position is infinitely superior to his father's and he has to prove it continually. Prices in Buenos Aires are the highest of any city in the world. Nothing seems cheap and plentiful but the dirty paper money. I never realized before why it was called "filthy lucre."

TYPES OF BEAUTIFUL WOMEN
SEEN IN BUENOS AIRES.

This brings me to the monetary system of the country. Argentina is the only country in the world, not on a gold basis, where you can exchange your paper money—there is no silver—for a fixed price in gold at any time, and this price is fixed by law.

There is a unit of one dollar gold, there is another unit of national currency of one dollar paper (*un peso*). A paper dollar is not worth a gold dollar and never will be, because the law says it is worth only forty-four cents in gold, and that is all you take it for, and it is convertible into gold at that value any time. But nobody wants gold, and thousands of Argentinians would not recognize gold or take it if offered to them.

The Government has one large bank, the *Caja de Conversion*, where there is \$200,000,000 in gold. This vast hoard of the yellow metal is to secure the paper money in circulation.

The appearance of prosperity in Buenos Aires is undeniable, yet many, especially foreigners, are very poorly paid and live a hand-to-mouth existence. An American, who cannot speak the language, without capital and nothing to sell but his labor, had better stay at home. If he can speak Spanish, which

THE COURTS OF JUSTICE, BUENOS AIRES.

should be taught in all our schools—and will be some day—he can find plenty to do at a profit.

Mechanics of all kinds obtain work with ease, but in the city they find it difficult to save on account of the extraordinary high cost of living. Such men as policemen, street cleaners, firemen, and other city employés, are disgracefully underpaid—a policeman gets only \$35 gold a month. The effect of this is shown in the quality of men who apply for the position.

There is a general tendency toward extravagance among

THE PALACE OF THE FINE ARTS, BUENOS AIRES.

all classes. The tendency is to spend in all directions. Of course, the enormous prosperity is the cause of this.

Although progressive in every way in things commercial, the real citizen of this country is still quite conservative as regards his social relations, family life and what he considers his code of honor. He will entertain you freely at his club and take you to the theater, but when he invites you to his home he believes in you, and has conferred the greatest honor he can give.

The *duello* is of almost daily occurrence, so much so that the papers either ignore it, or in the case of very prominent parties, only allude to it. Frequently the duels are fatal. In no case does the Government interfere, although it is contrary to law; but it is a "dead law," public opinion being against its enforcement.

A friend of mine in Buenos Aires, a newspaper man, who has fought many duels, was challenged while I was there. He accepted, selected pistols—he is a dead shot—but after due consideration the man who challenged him concluded that the reflection was only on his business and not his personal honor, hence there was nothing to fight about. Probably a life was saved, but I lost an opportunity to see a first-class affair of honor set-

MONUMENT TO THE INDEPENDENCE OF ARGENTINA,
BUENOS AIRES.

tled by the rules of the code.

Long before the city of Buenos Aires reached 1,000,000 inhabitants the question of the food supply for its citizens became a problem. There were markets, to be sure, but the enormous freights and the number of hands through which every article for consumption had to pass, drove prices up to several hundred per cent greater than when the goods left the hands of the producer. In addition to that, supplies of provisions and vegeta-

THE CITY WATER RESERVOIR OF
BUENOS AIRES, ITS WINDOWS ARE "MAKE BELIEVE," NOT REAL.

SCENE IN CENTRAL MARKET, BUENOS AIRES.

SILO SHAPED CONCRETE GRAIN ELEVATOR, BUENOS AIRES.

bles were intermittent and not at all reliable. Of late years, however, new markets have been built and a better system of bringing the produce right to the consumer has been organized. Still, while meat is cheap, the prices of vegetables and fruits are enormous.

Within twenty-five miles of Buenos Aires there is a natural fruit garden, on the delta formed by the many streams at the mouth of the river Paraná, yet the delivery of the fruit raised in this locality has been so manipulated by various rings that the consumer pays about 1,000 per cent more than the orchard man receives. Recently the mayor of Buenos Aires inaugurated a system of what are known as free markets, which were centrally located, and which met with instantaneous success.

The press of Buenos Aires is a complete surprise to any visitor in the city. Strange as it may appear, the oldest daily newspaper in Buenos Aires, in fact in the whole of South America—that never missed a number—is printed in English. It is known as the *Buenos Aires Standard* and is just fifty years old.

For many years the *Prensa* has held the proud position of being the popular newspaper of the country, and is yet re-

garded as "the old standby." Next to it comes the *Nacion*, a higher class paper with a smaller circulation.

There are about five hundred different publications in Argentina, of which one hundred and six are in Buenos Aires. The *Herald* is a very good English daily. About three years ago the Mulhall Brothers, who are the owners of the *Standard*, started a daily paper called *La Argentina*, which was initiated on absolutely American methods. It was an instantaneous success, and has the largest circulation of any newspaper in South America. The price of the paper was made an even five cents, Argentina money (two cents in United States money), which is the smallest nickel coin in circulation. What it has accomplished is due to the energy, enterprise and courage of its owner, Mr. Edward T. Mulhall. Several challenges and one or two duels have been the result of this new journalism.

Buenos Aires is well provided with large and soundly instituted banks. Of their reliability there can be no question,

but as to the system of banking, so far as it affects the convenience of the public, there is ample room for criticism.

There are four large English banks, one Spanish, two Italian, two French, two German, and others of native capital. The London and River Plata bank, and the London and Brazilian bank, have each a subscribed capital of \$10,000,000, and pay a regular annual dividend of twenty and fifteen per cent respectively. The Bank of the Nation, the national institution, has a subscribed and deposited capital of \$35,697,600; it is the only bank which issues, or rather has issued in the past, national currency.

With the growing importance of the Argentine Republic as a country, the business of these banks is naturally very profitable. Almost every man in business is carrying on his affairs with money borrowed from banks. He accepts paper and discounts it; he also has an overdraft, which in many cases exceeds his actual capital. But this credit is easily obtained where it is seen that he is actively engaged in doing business.

One of the most powerful institutions, and an American one at that, is the Young Men's Christian Association. The management of it is American all through, but it is conducted equally for the benefit of English and American residents. There are supposed to be about 30,000 English-speaking people in the city of Buenos Aires, although there are times when an American, who speaks no Spanish, will hardly believe it—he has such trouble in finding somebody who can understand him.

The Stock Exchange of Buenos Aires, otherwise known as the *Bolsa*, is still no more than in its infancy; it is a weak, puling baby at that. As a matter of fact there are no real trusts in Argentina and few industrial securities in which to gamble.

In the matter of schools, not only Buenos Aires, but the whole country, as far as the cities are concerned, can boast of being well provided, the educational system being splendidly carried out, and the children of foreign immigrants also being provided for in the educational institutions.

The churches of Buenos Aires may be described, for the most part, as of the plain and useful variety; they are neither startling nor attractive in architecture, except the cathedral,

THE FAMOUS CATHEDRAL OF BUENOS AIRES. A BEAUTIFUL BUT UNIQUE CHURCH. NOTE THE ROWS OF ELECTRIC LIGHTS TWINED AROUND THE PILLARS. THE TOMB OF SAN MARTIN IS IN THIS CHURCH.

which is unusual in construction and one of the show places of the city. Some of them are very old, but they are built upon the same simple, severe plan.

From an historical point of view there is an interesting church in *Calle (street) Defensa*. The Argentinians claim that they and the United States are the only countries that ever whipped the English, and this old church figures in the history of their affair with England. A body of England's troops once attempted to take Buenos Aires, and the city was bombarded. The church on *Calle Defensa* was partly demolished, and as a memento of this the cannon balls—nice, smooth, round affairs—were set in the plaster of the tower of the church when it was rebuilt, and they look very curious as they are seen projecting from the imitation stone work.

There are no churchyards to the churches, the dead being buried in cemeteries. Of these, the two principal burying-grounds in the city are the *Recoleta* and the *Chacarita*. The former is perhaps the most crowded cemetery anywhere, being comparatively small, and as a result, it is absolutely jammed

VIEWS IN RECOLETA CEMETERY, BUENOS AIRES.

with costly and imposing vaults and tombs, and many of these are open so that the entire interior may be seen.

On All Saints' Day an extraordinary sight may be witnessed in the *Recoleta*, as thousands of candles are burned on that day in the vaults, and a constant vigil is kept by the relatives of the dead inmates of the tombs.

There are few cities in the world, of the size of Buenos Aires, where so much electric power and light are used. All the streets are magnificently lighted, especially in the center of the city, and as there are many feast days during the year, when all the public buildings and most of the commercial houses are brilliantly illuminated, the amount of current that is used is something enor-

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The ordinary private residence of a Buenos Aires family is far from being either comfortable, attractive, or, in some respects, healthful. It is Spanish in its conception, and its rooms have glass doors, but no windows, with the usual *patio* or court in the middle. There is no provision made for heating in cold weather, and there is seldom hot water for bathing.

Recently, however, many modern houses have been erected by the rich who have traveled

ONE OF THE MANY BEAUTIFUL MODERN
RESIDENCES OF BUENOS AIRES.

abroad and enjoyed real comforts, profiting thereby in building their residences. Some enterprising persons have erected flat buildings, which have all the modern improvements to be found in such buildings in Chicago and New York.

The city of Buenos Aires is entitled to its proud position as the commercial capital of South America, as well as being the political capital of the most prosperous republic, except the United States, on the Western Hemisphere.

CHAPTER XX.

SOME ITEMS OF ARGENTINIAN HISTORY.

THERE is probably no other country in the world whose history, constitution and form of government so closely resemble those of the United States as do Argentina's. In age, as a republic, it is some thirty years younger. Its struggle for freedom and independence from Spain was brought about in much the same way as our own from England, although perhaps somewhat more easily. Men fitted for the great work arose, fought, bled and died and, as accident determined, were buried as national heroes or faded away into obscurity.

The Rio de la Plata is said to have been discovered by Solis, in a desire to emulate Christopher Columbus, in the year 1515. Others soon followed and founded the Spanish colonies that are now merged into the Uruguayan and Argentine republics. The Colonial period is not particularly interesting as history except to the Spanish student. It was followed by what is

PRESIDENT'S PALACE, ON THE PLAZA VICTORIA, BUENOS AIRES,
ARGENTINA

known as the Viceroy period, which system led by slow degrees to the ultimate rising of the colonies and breaking of the yoke of Spain. But while in the case of the United States the great grievance was taxation without representation, that of the settlers in South America was the lack of protection by Spain of her colonies against her enemies, principally the English. Poor Spain, as a matter of fact, was too busy at home fighting the same enemy to pay much attention to the troubles of her poor relations abroad. So the South Americans banded together to defend themselves. A succession of unexpected events, incompetent commanding and, perhaps, the inscrutable decrees of Fate, led to the inhabitants of Buenos Aires, under Liniers, obtaining a sweeping victory over a force of 10,000 British who landed in the city from Montevideo, then actually in the hands of England.

Lieutenant-General Whitelock and his whole army were taken prisoners by Liniers after a brilliant fight. They were only set free by yielding to Liniers' demand that Montevideo should also be evacuated. Thus Montevideo was restored to Spain, temporarily, by Buenos Aires.

But it was the effect of this victory over a picked force of British in Buenos Aires that led to the downfall of Spain in South America. The great struggle came and Argentina shook herself free first in 1810, and her big sister up North, the United States, was the first to welcome her and recognize her independence. The memorable day, May 25, 1810, when Buenos Aires won her independence, has ever since been celebrated as the Argentinian "Fourth of July." All the other colonies under the Spanish rule followed suit in quick succession within a very few years.

Like the United States, Argentina has two popular national heroes, San Martin and Bartolome Mitre. There are others, many of them; but these two always emerge to the front, after periodical anniversary runs on others, easy victors and the real thing in historical heroes. In fact, they occupy in the hearts of the Argentinians the same position that Washington and Lincoln hold with us. Yet San Martin, after sacrificing himself, his ambitions and his prospects to further the freedom of his country, was allowed to leave it, almost in disgrace, be-

THE SAN MARTIN MONUMENT, BUENOS AIRES.

cause he would not engage in politics and comic opera civil wars. He died in obscurity at Boulogne-sur-Mer, in France, in 1850. It was only years afterward that the Argentinians were seized with a spasm of gratitude toward the man who really brought about their freedom, and had his body brought back in pomp and state to his country on a man-of-war. It now lies in a fitting tomb in the cathedral at Buenos Aires.

Bartolome Mitre was a soldier, statesman, art-lover and intense patriot. Most patriotic utterances on record that are treasured by Argentinians are his. His term of presidency was one that is quoted for its cleanness. In fact, Mitre was not a rich man either before or after he was elected, and derived his income from the ownership and publication of *La Nacion*, the greatest influence for liberty and justice in this country. Great honors were accorded General Mitre at his death, which occurred about seven years ago.

Of Presidents of the country there is an assortment from which to choose. The names that will live most vividly in the minds of the people have some specialty attached to them. There is Sarmiento, "the sapient," he might be called. He is

credited with having done more to further education in Argentina than all the rest of its rulers put together. It was Sarmiento who brought down a batch of American school teachers to Argentina, male and female, some of whom are still living and drawing pensions from the Government. He had, previous to his election, been a resident in Washington for many years, where he was Argentina's minister to the United States. He had intense faith in everything American.

There have been tyrants also in this free and independent republic. At least, there has been one, Rosas, the Dictator, as he was called. Rosas was undoubtedly a tyrant of the most pronounced type. But he was also a soldier of unflinching courage and in many ways covered the country with glory. Rosas carried his despotism to such an extent that a junta was formed which brought the Italian liberator, Garibaldi, to the country, with the secret intention of assassinating or removing Rosas in some other way. Garibaldi gave up the idea and went back to Italy. Rosas was dethroned at last, however, and escaped to England, where he died, in Southampton, twenty-five years later.

Of Presidents who have excelled in sheer statesmanship and diplomacy, the model is found in the person of General Julio Roca, who served two terms and is still living at the time of this writing. It was during General Roca's second term that the long pending boundary dispute with Chile was settled once and forever. General Roca now dabbles but little in politics, although he is still considered quite a factor. The caricaturists always draw him in political cartoons as a fox, on account of his accredited astuteness. He is one of the largest land owners, if not the richest man, in the country. I had the pleasure of being his guest at his La Larga ranch, as described in a later chapter.

When it is considered that the constitution of the Argentine Republic is founded and based absolutely on the Constitution of the United States, and on that only, another similarity between the two republics will at once be noticed. Most of it reads word for word with ours, but certain sections have been modified to accord with the State church, Latin ideas and Latin common law. There are many things in the constitution of

GENERAL JULIO A. ROCA, TWICE PRESI-
DENT OF THE REPUBLIC OF
ARGENTINA.

Argentina, however, which have not been adapted and, in consequence, are ignored by the laws of the country. Trial by jury, for instance, is provided for by the constitution, but not by any statute in existence. When a man, a short time ago, demanded a trial by jury from the Supreme Federal Court, as a constitutional right, the court, the Government and the country were all in a quandary. The appeal has not yet been answered—just temporized with.

The similarity of the two constitutions, therefore, provides for a similar form of government and method of administra-

tion. And it is similar—on paper. The President of the republic has similar powers to the President of the United States, by constitutional right. But each successive President has tacked on a few extra powers, which, if not constitutional, have become firmly embedded by precedent. Only three years ago ex-President Alcorta suddenly and peremptorily adjourned Congress, because of opposition to the passing of the appropriation bill, and declared the same for that year a law by decree. The members of Congress refused to adjourn and tried to hold sessions. The Congress House was locked up and the members locked out. When they tried to force an entrance the President ordered the commanding officers of the police to prevent and arrest them. The comic part of it came in when the chief of police was tried, convicted and fined and suspended from duty for obeying orders. But that decree became a law and has remained a law.

The Government of Argentina, therefore, consists of the President, Senate and House of Representatives, or Chamber of Deputies, as it is called. That is what the constitution says it is. But the real government of the country is vested in what is known as the Executive Power. The Executive Power consists of the President and the Cabinet, or such portion of the Cabinet as the President may call into conclave. The President forms his own Cabinet. If the Cabinet meets without the President, it is a meeting of the Cabinet, but not of the Executive Power. The President now calls himself the President of the Nation and not the President of the Republic. This is not supported by the constitution, but was promulgated by the present Executive Power. It is very simple and very easy for the party in power.

There are fourteen provinces—not States—and nine territories. Each province is supposed to make its own laws, elect its own Governor and local authorities. They do. But the power of the Federal President looms large in the capital of every province. What is known as "intervention" is a matter of constant occurrence. Sometimes the intervention is asked for by the provincial Governor, sometimes by the rest of the provincial government against the Governor. It might be asked for by a new party altogether, suddenly mushroomed into exist-

ence. Sometimes it is not asked for at all, but is considered about due in that particular province. But whether it is asked for or not, it is never refused and, in fact, is liable to happen at any moment.

During my stay of nearly three months in Argentina, I had been in ten provinces and their capitals. Out of fourteen I met most of the Governors and made a study of the situation, and I am satisfied that the system of national interference is not a bad one for the people, who only want good government, and not the offices for what there is in them.

Members of Congress are elected. They are so much elected that they are elected long before election day. Elections in Argentina are as beautifully certain as are the weather or the crops. The weather here, year after year, is periodically perfect. There are droughts, then heavy rains. Crops yield richly, their only enemies being the drought and the locusts. Revolutions are the locusts of politics and elections. The only remedy for mistaken government for years has been in revolutions. Elections are powerless. The outgoing Government simply nominates and elects the incoming force. And so it goes on like the perennial growth of cereals.

The mainstay of the Argentinian army is conscription. It is also its principal ailment. Where a lot of neighboring powers are bunched together on one continent and rely for their military strength on conscription, it is simply a race for the biggest army or navy. Nothing else. The country that increases its population fastest is raising the biggest future army. A peace convention which would do away with conscription throughout South America would render war impossible in this part of the world. There was a funny situation connected with one of the last revolutionary elections here. The Vice-President was captured and held as a hostage. He wrote the President that his life was in danger and would pay the price, if the President did not pardon the revolutionists—the whole affair had been a failure. The President knew the Vice-President was in sympathy with the opposition and that this was only a ruse for pardon, so he wrote back: "It is a glorious thing to die for one's country." With the Monroe Doctrine of Uncle Sam in force there

is no danger from a foreign foe, and the republics in South America would have to arbitrate.

The peace forces of Argentina's army number on paper 20,000 men. The cavalry are undoubtedly the best of the service. The field artillery is much open to criticism. Taken as a whole, the Argentinian soldier is undoubtedly the best, physically, in South America. His mixture of blood, with a drop here and there of Celtic and a dash or two of Anglo-Saxon, has given him a fighting brain. But his term of service is too short. Still, compared to other armies in South America, Argentina's land forces can be counted on to make a good showing.

The navy is an unknown quantity. A fever for big battleships was engendered in South America a few years ago, and Brazil set the ball rolling by ordering "Super-Dreadnoughts." Argentina was compelled to follow suit and went Brazil one better by ordering two monster battleships from the United States, of a far more scientific and up-to-date pattern. But the

ADMIRAL O'CONNOR, OF ARGENTINIAN NAVY,
WITH WIFE AND DAUGHTER. TYPES
OF ARGENTINIAN HIGHER CLASS.

DR. ROQUE SAENZ PENA, PRESIDENT OF
THE REPUBLIC OF ARGENTINA.

personnel of the navy, that is, the man behind the gun, is conscript, also. Consequently the body and backbone of the navy is constantly passing along and away. Conscription renders Argentina's navy, as stated, an unknown quantity. The training of officers, the school of command, is in the highest perfection. But here again we are confronted with a regiment of colonels and "nobody to carry water to the horses." It is a mystery to the marine department as to how and with whom the new monster destroyers, coming down from the United States, will be manned.

Necessity knows no law. Perhaps if the floating leviathans

are ever put into battle, men will arise and stand efficiently at their posts, as they did in the past, and enable this country safely to cast its bread upon the wide waters of the world and look with continued pride upon its flocks.

It is difficult for the people of the United States to understand why the elections in South America are not freer than they are. If you understood the people better you would know that in many cases they need protection from their own acts. The big, unselfish men of the country know this, or the condition could not last, any more than did the Spanish rule when it was recognized as useless. With general education—and Argentina has a fine system of free schools—everything will change. In twenty years Argentina, and nearly all the South American republics, will have elections as unrestricted as they are now in the United States. Under the present system, life and property are as safe as in any country, and, after all, that is what Governments are for—not for the jobs.

I had the honor of being presented to Gen. Roque Saenz Peña, the President of the republic, who has the confidence of the people and is well worthy of it. He offered his services to Peru, in her conflict with Chile, and fought many a hard battle for that country. He was the delegate to the Pan-American Congress at Washington and delivered an address in English before that body. I had a long audience with him and he was much interested in the progress of the United States, especially where our advances and institutions would benefit his country. I was introduced by Mr. Robert Woods Bliss, the *chargé d'affaires* of the United States legation. Our legation in Argentina occupies the foremost position among all the Governments represented. The military *attaché* is First Lieut. J. S. Hammond, from Chicago, who is very popular in Argentina. The United States is well represented now in our legation and consular service in South America. This could not be truthfully said up to a few years ago.

CHAPTER XXI.

TOURING THROUGH ARGENTINA.

WELL do I remember, how as a boy, I used to hear the "barkers" in front of the sideshows of the big circus yelling: "Walk up, gents, buy your tickets! Before the morning sun arises we will be many miles away!"

It was after this fashion I "did" Argentina outside of Buenos Aires. I was continually "up and away." The railroads treated me with the greatest courtesy, placing at my disposal a private car having sleeping, observation, and cooking compartments, in the care of which Charlie, my personal servant, was perfectly at home.

For over a month I lived "on wheels," most of the time being spent in going from one place to another. We would

"shoot up" a town or city and the surrounding country during the day with our cameras (not guns) and move to the next place during the night, thus saving much time.

I visited the capitals of ten provinces (States) out of the fourteen that comprise Argentina, and all the chief cities of the country, traveling 13,000 miles by railroad, water and on horse-back.

Our first stand on this long trip was made at La Larga, where we enjoyed the hospitality of General Roca, twice President of Argentina, and the interesting information gained there will be found in the chapter on Ranches. Here I found a station agent and telegraph operator, who received my cables from Chicago and got every word correct.

The next stop was Bahia Blanca, on the Atlantic Ocean, the best seaport in Argentina, the city having 40,000 population. Here I spent a pleasant evening with Mr. Charles H. Doherty, formerly of Boston, who has been here twenty years; he is a successful contractor and has grown rich building docks and elevators. At dinner in Mr. Doherty's bachelor apartments, I met Mr. F. A. Jones, another "man from home," who is quite a character. He was the United States consul at Bahia Blanca for seventeen years and has an inexhaustible fund of stories about the country. The third American at the dinner was Mr. Woodward, a Texan, who is in the sheep business. During one of the revolutions he was put in jail and all his sheep taken from him. He has never received any satisfaction and our Government has never taken the trouble to secure justice for him.

Mr. Arthur H. Coleman, the local manager for the Southern Railway, took me around in a tug, and I thus got a comprehensive idea of the port and its present and future importance.

The city of Bahia Blanca is very substantially built. Three railroads have terminals here, the first in importance being the Southern Railway, because it more completely serves the territory around this port, and "being on the ground first" it secured the most valuable terminal sites. They have great docks, elevators and warehouses and can handle 2,000 cars of freight per day.

The second railroad in point of importance is the Buenos

Aires and Pacific, which has a line down through the center of Argentina, connecting east to Buenos Aires, and west to Mendoza and the Pacific Ocean. Its terminal here is a few miles south and west of the Southern, where it has built large grain elevators and a flour mill.

The French line from Rosario direct to Bahia Blanca has no permanent terminal and lands at the navy docks, where it is a tenant subject to notice to vacate at any time. This road is for sale, and is supposed to have been built as a "hold up" on the other roads.

The fact that this port is the only one, in all Argentina, with water deep enough (thirty feet) to float large war vessels, makes it of first importance. The port is thoroughly protected by islands from the ocean, and is the only one where Argentina can keep the two great warships being built for her in the United States.

Southwest of Bahia Blanca is a salt mine with enough salt, 99 per cent pure, to last Argentina for fifty years; in fact the supply seems inexhaustible, for as fast as the salt is removed it comes up from the bottom.

SALT MINE NEAR BAHIA BLANCA,
ARGENTINA.

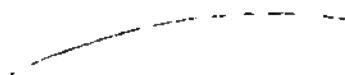
Mar del Plata is on the Atlantic Ocean, 250 miles directly south of Buenos Aires. It is the summer (October to April) Monte Carlo and fashionable watering place of the republic. All kinds of gambling games are run here, being permitted by the Government, and the only limit I heard of was the blue sky—and the atmosphere is very clear here.

It is a very dull place in the winter (April to October), but in the summer has a population of 50,000. The bathing is good, the buildings and streets very modern, and an unlimited amount of money is spent during the season. An example of

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FISHERMEN'S BOATS AT MAR DEL PLATA.

MAR DEL PLATA, THE MOST BEAUTIFUL AND



THE HOTEL BRISTOL, MAR DEL PLATA.

POPULAR WATERING PLACE OF ARGENTINA.

the cost of living here is shown by the fact that a fairly good lunch costs five dollars!

La Plata is located on the coast only one and one-half hours' ride from Buenos Aires. It is the capital of the province of Buenos Aires, and has a population of 30,000. At one time this province thought it was all Argentina; in fact, it remained out of the confederation for some time, and for the sake of peace the capital of the province was separated from the capital of the republic about thirty years ago.

At the time La Plata was improved by provincial capital buildings, credit was so good that unlimited money could be secured, and the costly and beautiful buildings are monuments to useless expense and extravagance for which the people were heavily taxed, and which did much to bring on the panic of the '80's all over the world, beginning with the failure of the great banking house of Baring Brothers, of London, England, who were heavily interested in financing Argentinian projects.

It is impossible to separate the province of Buenos Aires from any description of Argentina; when you have read one you know the other, except that La Plata is "the place the fish come from" for Buenos Aires and the interior markets.

There is a splendid chance to develop the fish in-

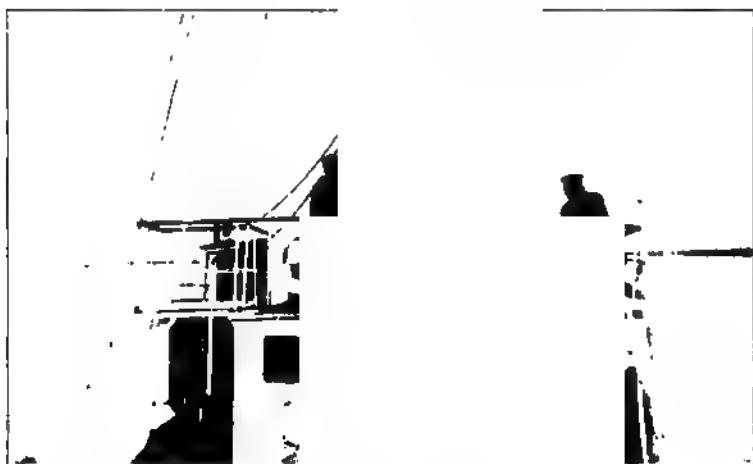
POLICE HEADQUARTERS AT LA PLATA, ARGENTINA.

THE FINE RAILWAY STATION AT LA PLATA, ARGENTINA.

ward, the next great port is Rosario, population 200,000, on the Paraná River, 200 miles northwest of Buenos Aires. This city is the Chicago of Argentina. Here ocean-going vessels drawing up to nineteen feet of water come from the ports of the world and return laden with wheat, corn, alfalfa, meat and cattle.

There are miles of docks and endless warehouses and elevators located on the river, as is evidenced by the fact that it took me two hours on a fast power boat to pass from one end to the other. It is the most wonderful river harbor in the world, and though it is nearly 300 miles from the ocean, it is also a sea-port. You see the flags of all countries, except the United States, floating from the masts of steam and sailing vessels of all kinds, from the barge to the ocean greyhound. The river is three miles wide here and nearly one hundred miles wide at the ocean.

Fifty per cent of the freight traffic is handled by the Argentine Central Railroad, a fact I learned from Mr. Adams, division superintendent of this road, who gave me nearly two



MR. BOYCE ON THE BRIDGE OF THE STEAMER ALCARAZ, PARANA RIVER, ARGENTINA.

WATER-FRONT VIEWS AT ROSARIO, ARGENTINA.

days of his time, during which I secured much information that space forbids using.

Mr. Adams is the president of an organization that handles all the vessel freight in Argentina. The freight handlers, or stevedores, belong to no union, but they are guaranteed top wages when there is loading and unloading to be done, and are paid a reasonable amount per day when there is nothing to do. They also have a sick and death fund, and the absence of strikes at any time, for any reason, makes it possible for shippers and vessel owners to figure when they can receive and discharge cargoes. This plan has worked well for five years.

The next port going north is Santa, Fé, a city of 20,000 population, which is the capital of the province bearing the same name. It is like most other cities of Argentina—plaza, cathedral, Government buildings, poor hotel, hustling cab drivers.

Santa Fé has two railroads and a port built by cutting a

canal five miles long to the Paraná River. The country here and on the west bank of the river north to Paraguay is very low and swampy. The chief export from this port is timber.

We left our car at Santa Fé and crossed the river to Paraná, which is a pretty city built on a high bluff overlooking the Paraná River. In May, 1853, a national congress was held in Santa Fé which sanctioned a federal constitution and named Buenos Aires as the capital, but as the province of Buenos Aires refused to join the federation, the seat of government was located at Paraná, which for six years remained the capital. The city has a population of 30,000 and is the capital of Paraná. Ships drawing fourteen feet of water can dock here and it has a good port.

The provinces of Entre Rios, Corrientes and The Missions form a very important part of Argentina. The country comprising these provinces is not prairie, but is rolling and well watered by many rivers; it averages 1,000 feet above sea level

A BIRD'S-EYE VIEW OF THE

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A PANORAMIC VIEW OF THE CITY

CITY OF PARANA, ARGENTINA.

OF CORRIENTES, ARGENTINA.

and produces much grain, while cattle and sheep do exceedingly well. The whole country is divided up into smaller farms than the remainder of Argentina, and will support a very large population. In the northeastern portion of the department of The Missions there are many fine water powers, and I look for this section of Argentina to improve very rapidly. It all lies east of the Paraná River.

If Uruguay, the Entre Rios country and Paraguay were under one government they would form the best average political division in South America, from a climatic and productive standpoint. There are at least one hundred good ports in this geographical division, from many of which ocean-going vessels come and go.

Crossing back over the Paraná to the west side, from Corrientes, I found myself in the Argentine *chaco*, a tropical swamp country where they are developing cotton and cane plantations. In this section, for three hundred miles north and west, as far as transportation by rail or water reaches, the chief

SCENE ON THE PARANA RIVER, ARGENTINA.

industry is the taking out and shipping of *quebracho* wood to the United States and Europe.

This wood is used for tanning hides of all kinds. It is a dark red in color, is very heavy and cannot be floated. The trees grow about thirty feet in height and are quite crooked. Some companies grind the wood into a powder about as coarse as sawdust, which makes it easy to ship. Others extract the juice, but as yet more of it is shipped in logs after they are

CATTLE HIDES IN A TANNERY YARD, ARGENTINA.

term for "hard on ax," and those who handle the wood declare it has been rightly named.

Returning to Santa Fé, we boarded our car for the northwest interior near the foot of the Andes Mountains, where it is hot and dry and the chief crops are cane and tropical fruits, grown by irrigating the fertile soil.

I met a newspaper man who had just returned from exploring the section north of Tucumán in search of cheap land,

and I give in his own language the story of his experience there:

"I arrived late in the evening at Pecoy, a collection of huts on the bank of the river. Many of the inhabitants of this place have bad records and are proud of them. I was in doubt whether to feel nervous or secure in this place, but decided to stop until some decent person went by on the road. I began to feel queer—the bad water, want of proper food and little sleep telling on me.

"I did not like the looks of the first man that turned up and announced that he was going my way. However, he bunked alongside of me and the next morning he started on, but finding that I did not follow he returned in the afternoon.

"That night he went to his mat fully dressed, with his mule saddled up to make a quick getaway. I lay down late with my revolver in one hand, an open knife in the other, and a tin can under my head with a bit of wire laid around to make a noise and waken me in case I fell asleep and was attacked.

"About two o'clock in the morning my companion arose and came toward me; I covered him with my revolver and decided to use one of my cartridges, but he took the hint and lay down again.

"In the morning the woman of the *rancho*, who was evidently in on the deal, advised me to leave by a small path and make my escape—but I failed to take the hint. I waited two more days, my neighbor regularly starting off and returning. He finally informed me that a family from Pecoy was going my way, and as I evidently distrusted him he had arranged for me to accompany them.

"The name of the family was notorious. I waited until he started again and then I left along the cattle trail to Laguarutas. This is a lonely spot some thirty miles from any habitation, and the scene of many cruel murders.

"What was my surprise, on coming to the river, to find the family waiting for me; it was composed of an elderly man, another man and his wife, and a peon. The reception they accorded me foreboded no good. They were dining and I had some trouble keeping out of reach of their big knives.

"Finally they mounted and I rode behind them; I had my

doubts of ever reaching Taragal. The elderly man and the woman jockeyed around until they got behind, and I heard the woman suggest to the man to hit me on the neck, to which he replied that I did not give him the chance.

"Later on in the day I had the satisfaction of seeing them held up by three men, and in the confusion I succeeded in getting past, though I soon heard hoofs clattering after me, which influenced me to spur my mule to full speed.

"I passed a band of Matoca Indians, who had that morning murdered two travelers. Beneath a tree I saw the body of a poor fellow whose throat had been cut. The birds were already feeding on him. I was glad to give up the object of my trip into that section, and considered myself fortunate in getting out of it."

Evidently that section of the country toward which we were journeying was one of adventure and hair-raising experiences.

CHAPTER XXII.

ARGENTINA'S VINEYARDS AND TOWNS.

IT IS as far west from Santa Fé to Tucumán, Argentina, as it is from Chicago to Bismarck, N. D., yet it took us less time to make this trip on the Argentine Central Railroad (a splendid system) than it takes to make the journey from Chicago to Bismarck.

Leaving Santa Fé in the morning we traveled all day through prairie country, just like our own West, and it made me homesick. At the time we made this trip it was early winter in Argentina and spring in the United States. Oh, how I missed the springtime, when everything is budding out into new life! And that is one of the joys that is never experienced in Argentina; they do not have springs or falls in South America, only summers and winters!

Arriving in Tucumán in the morning, we could not see out of our car windows for the dust. We had passed through the poor, dry part of the country at night, and the windows of our car were "frosted" from the accumulated dust gathered during our journey.

Before I was dressed Charlie came rushing into my room and excitedly exclaimed: "Fo' de Lord's sake, Mistah Boyce, dey done jus' shot up everybody in de station! Git yo' gun!"

There was indeed great excitement, for two men lay dead in the ticket office, all the cash not locked in the safe was gone, and soldiers and police were everywhere. Four weeks later I heard that they had not captured the bandits, who in making their raid did not even give the poor ticket agents a chance to hold up their hands, but shot them in the back. They also took several shots at the division superintendent, Mr. S. T. Harris-Smith, but he was some distance from them and escaped. His wife, a brave United States woman, ran upstairs and got his gun for him, but the robbers and murderers had

THE GOVERNMENT PALACE IN COURSE OF ERECTION, TUCUMAN, ARGENTINA.

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made good their escape before she returned with the weapon.

The incident served to recall the experience of a newspaper man in the region north of this section (which I related in a previous chapter) and it put us all on the watch for trouble when we started on our horseback trip into the wilds north of here.

That we did not come into open conflict with some of the brigands along our route is perhaps due to the fact that we were all well armed and had an escort that was perfectly reliable. However, I am inclined to say that what this section needs is, perhaps, five hundred Texas rangers for a year or so, then robbery and murder would become less common.

Tucumán is the Philadelphia of Argentina—it was here on July 9, 1816, that the Declaration of Independence was signed. The little old house, desk and other furniture made famous by this historic event are all in an excellent state of preservation, for ex-President General Roca was born near this city, and he wisely had the little old "Independence Hall" enclosed in a magnificent steel and concrete building, and made a trust fund for its maintenance.

The employés looking after the property will not accept a tip from sightseers, being well paid for their services. The Argentinian man and woman (not the foreigner) as a rule refuse tips. A small boy who carried my satchel from the omnibus to the hotel office refused a tip, with the added expression, "My boss pays me." He must have been a Boy Scout.

Tucumán is the center of the sugar-cane section of Argentina, and the entire country about is dotted with cane mills.

INTERIOR VIEW OF SUGAR REFINERY, TUCUMAN, ARGENTINA.

The Central Railroad hooked my car to an engine and ran me around a whole day through cane plantations.

Owing to the protective tariff on sugar—about eight cents a pound—this business is extremely profitable, and Tucumán is very prosperous as a result. The city is the capital of the province of Tucumán, and its public buildings, beautiful parks, well-paved streets, finely-stocked stores, and well-fed and neatly-clothed people, impress the tourist, making the rob-

beries and lawless conditions that prevail in the outlying regions stand out in still more glaring manner.

Tucumán is also a winter resort for this part of Argentina, and naturally it is a gay town and quite up-to-date. They were just finishing a new hotel, theater and casino (gambling house) at a cost of \$1,000,000, when I was there. They were also developing a big hydro-electric plant thirty miles from the city. The "head" or fall is 525 feet and it will bring 15,000 horse-power to the city. The entire country about

THE RIVERA INDARTE THEATER, CORDOVA, ARGENTINA.

Tucumán depends on irrigation, as it snuggles up close to the base of the dry Andes Mountains. Coal is eleven dollars and a half per ton.

Going from Tucumán to Cordova, the third city of importance in the interior of Argentina, we had to run east to Rosario and then west again, covering about 1,000 miles, and most of the journey is through a very dry country. Irrigation is necessary, and there are large areas for which there is no water.

THE BANK OF CORDOVA, ARGENTINA.

Cordova is located near a river which has its source in the Sierra Mountains, and so precious is the water of this stream that it is first stored and used to furnish power and light, after which it is turned into the irrigation ditches. Everything grows where irrigation is applied. The Government has an experiment agricultural farm at this point, but its instruction must be along "dry" farming lines, as we could scarcely see the farm for the dust when we were there.

J. G. White & Company of New York, the largest electrical engineering firm in the United States, built a hydro-electric power plant near here, but they must have had wrong figures as to the amount of water available, or the local company had more money than it knew what to do with, as there are twice as many water wheels and generators as there is water to supply power. This company is now building another plant farther down the river, in order to use the water over again.

There is an astronomical observatory near Cordova, in charge of which are three homesick people from the United States. Next to taking care of a lighthouse this must be the most lonesome job in the world. Cordova also boasts of a

very old university, which was established in 1613 or 1316. I do not remember the date, but it reminds me of the story of the small boy who was asked when his father was born, and he replied that, "It was in 1418 or 1814—blamed if I can remember which!"

I motored from Cordova to Alta Gracia, about thirty-five miles. Alta Gracia has the reputation of being located where the air is so pure that all cases of consumption are cured. The statement comes very nearly being true, and as a result it is well patronized by persons with tubercular troubles. Cordova has 75,000 population, and except for the dust and lack of water would be a fine city.

From Cordova I returned to Buenos Aires and made a new start. I was sorry to bid good-by to the Argentine Central Railroad, for it is a splendid system and is well kept up, as are all English-owned and operated railways.

The most important city in Argentina, not having water transportation, is Mendoza, the center of the grape and wine industry. I left Buenos Aires one afternoon, arriving at Mendoza twenty-four hours afterward, a distance of 700 miles to

the west. This is the end of the wide-gauge railroad; here one changes cars for the Trans-Andean Railroad, which goes through a tunnel in the Andes Mountains and lands one in Chile, saving a two weeks' trip down one side of South America and up the other. Unless the South American tourist has plenty of time and money, or is after information for a book or newspaper articles, as I was, he cannot afford to take the risk and go through the hardships of a trip around the southern end of South America through the Straits of Magellan. The scenery from Mendoza to the tunnel is the finest in Argentina, and the person who makes the journey is well paid.

The Government owns the irrigation plant at Mendoza, and in the vicinity there are 100,000 acres in vines. The French grapes were introduced twenty years ago and the wine made equals the French claret and sauterne.

It is said that seventy per cent of the water in the irrigating ditches sinks into the bottom of the ditches, and that as a result water is scarce. If the bottoms of the ditches were

THE RUINS OF A CHURCH DESTROYED BY EARTHQUAKE,
MENDOZA, ARGENTINA.

concreted they could plant 200,000 more acres in vines. Obviously this should be done, as it never rains in this region.

Mendoza is subject to earthquakes, and fifty years ago every building in the city was shaken down, 10,000 lives having been lost. The city is quite a bustling place, as an evidence of which eighty passenger trains arrive and depart each day, though most of these make but short trips—not unlike our own suburban trains.

The vineyards support an immense population, 50,000 people living in Mendoza, and the country districts are thickly populated. During the grape-gathering season two solid trains loaded with grapes are shipped daily to Buenos Aires, besides 2,000,000 casks of wine (forty-two gallons to the cask) are made annually in this region.

San Juan, with a population of 20,000 and lying fifty miles north of Mendoza, is the capital of a province bearing the same name. San Juan is nearly three hundred years old, and I had expected to find it a very interesting place, but was disappointed. It is as dry as the country about Mendoza, noth-

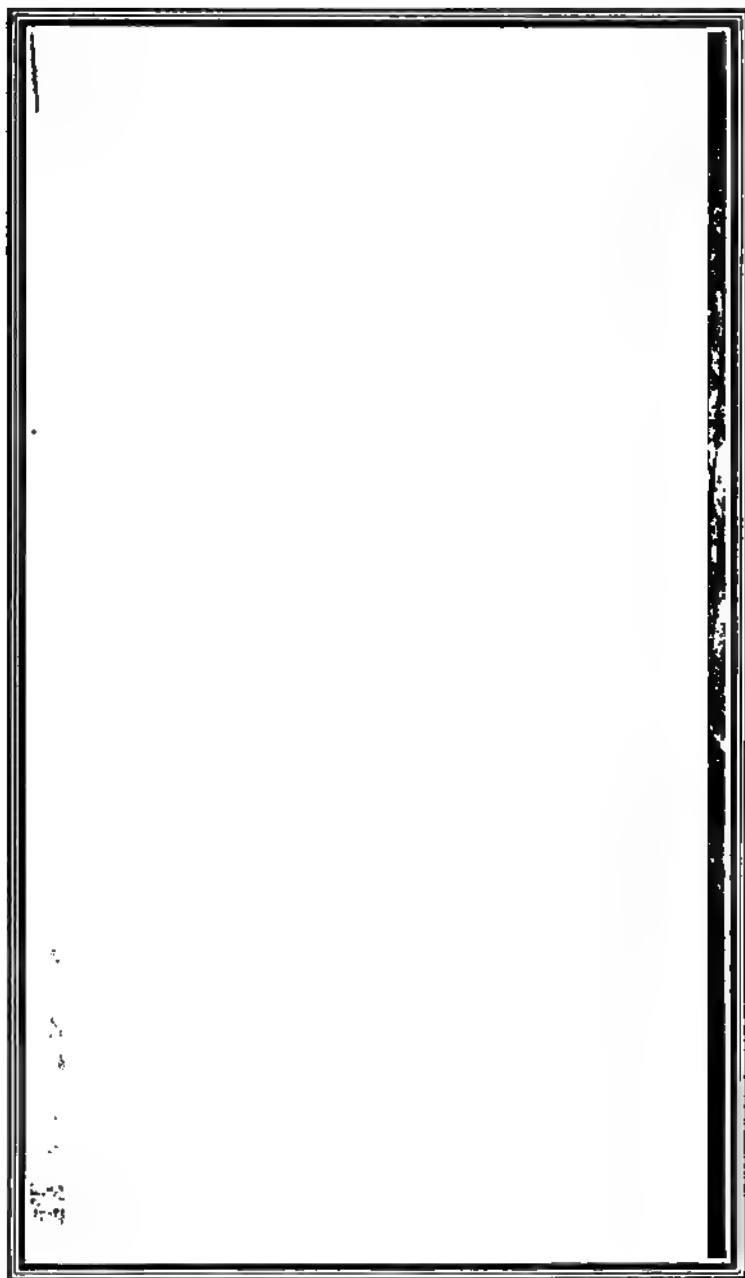
A STREET ROLLER, SAN JUAN, ARGENTINA.

ing being raised except with the aid of irrigation. Grapes do well, and judging from the number of children that followed us about while we were photographing, large families must be the rule.

The provincial government of San Juan was in a bad way financially, a defalcation of \$3,000,000 gold recently having occurred. As a result the national Government had appointed a Governor and taken control in accordance with the Argentinian plan of intervention.

San Luis, the capital of another province, two hundred miles east of San Juan, was reached one night by attaching our car to a freight train. This province was also in trouble,

A MILKMAN AT SAN JUAN, ARGENTINA.



TYPES OF PEOPLE. SCENE IN FRONT OF RAILROAD STATION, SAN JUAN, ARGENTINA.

MR. BOYCE, HIS SECRETARY, MR. GULICK, AND HIS SERVANT,
CHARLIE, IN A COOPER SHOP IN SAN JUAN, ARGENTINA.

RURAL SCENE NEAR SAN LUIS, ARGENTINA.

caused by the dishonesty of trusted officials, and the national Government had intervened, as in San Juan.

The principal occupation of the people of this region seemed to consist of digging the roots of a small tree or bush that grows in this dry soil, and selling the roots for firewood. A low range of mountains runs through the province and there are a few streams, along which it is possible to raise a limited number of cattle. The population of the town of San Luis is 10,000, and the largest thing there is the railroad station.

One evening, about seven o'clock, my car was attached at San Luis to the through passenger train for Buenos Aires, and the next morning, at six o'clock, the "beauty sleep" of everybody on the train was suddenly interrupted by a crash and bump that pitched us from our berths to the floor.

There was a moment's lull just after the crash, during which we rubbed our bruises, then I heard Charlie, my servant, yelling: "We're all right! We're on de track!" To which I replied that he was mistaken, so far as I was concerned, as I was not on the track, but on the floor.

We dressed and got out to see just what damage had been

THE ENGINE OF MR. BOYCE'S TRAIN WITH ITS NOSE IN A
FREIGHT CAR AT ALBERDI.

LIFTING THE WRECKED CAR FROM THE TRACK.

done, and ascertain if our services were needed in caring for the injured, but fortunately the wreck was not that serious. Investigation revealed that our engineer must have gone to sleep, for on the dead level, where he could see straight ahead for five miles (it being daylight), he had run into a freight train and jammed two freight cars into one and put his engine into the center of the two cars.

It took six hours to get a wrecking train and four hours to clear the track—and I lost a day. Had it been our train that was run into, my car being the last, there probably would have been a funeral with myself in the first "buggy" behind the pallbearers. However, we secured some good photographs of a wreck, and made the acquaintance of an interesting ranchman who beats the railroads by not using them.

This man has a chain of ranches extending from this point to Buenos Aires, one hundred and fifty miles distant. These ranches lie about twenty miles apart and he drives his cattle to market, fattening them on the way. He is the largest ranch-

owner in Argentina, having over 300,000 acres of land, all fenced and under cultivation or in alfalfa. The railroad people complain of this unfair competition, which strikes one as being rather humorous.

It is impossible for any country to develop its natural resources without adequate transportation facilities. This is what Argentina possesses. Her splendid railroads, big rivers and ocean frontage afford better and cheaper facilities for moving her products than exist in any country in South or North America. This accounts for her prosperity and the stability of her Government.

The country with the most revolutions is the one where it is most difficult to dispatch troops quickly. Argentina, with a population of nearly 7,500,000 has 15,000 miles of railroads, or more in proportion to her population than the United States.

The standard gauge of the railroads of the United States and Europe (except Russia) is four feet eight and one-half inches. In Argentina the standard gauge is five feet six inches, and as the railroads are owned principally by English capitalists, you will wonder why this is so.

The standard gauge in Russia is five feet six inches, the same as in Argentina, and it is owing to this fact that the railroads of this republic have the same gauge. Again you will wonder why. It is the old story: "As the twig is bent the tree's inclined."

At the close of the Crimean War in Russia in 1854, England found that she possessed some cars and locomotives in the Black Sea region that did not fit the gauge of the railroads at home, so some speculators bought them cheap and started the first railroad in Argentina. As more cars and locomotives were needed they were bought to fit the rails already laid, and the little road became a great system, still using the five-foot six-inch gauge. Thus, as "the twig was bent the tree inclined."

When Spain controlled all of South America, except Brazil, she established Lima, Peru, as the seat of government, because it was near the great source of gold and silver. She gave to a "merchant trust" located in Cadiz, Spain, the right to sell all the goods shipped to South America, and for three

hundred years all merchandise shipped to, or products sent out of South America, were forced to follow one route.

Take your map, please, and follow me: From Spain to Panama, across the Isthmus, down the Pacific Ocean to Peru, then by llama, burro and the human back, via Lake Titicaca and La Paz, Bolivia, down the eastern slope of the Andes, and through Argentina to Cordova, where forty per cent additional duty was added, when the goods were allowed to be distributed to Paraguay, Buenos Aires and Uruguay.

The freight, shrinkage, theft and losses added 1,000 per cent to the cost when the goods were received by the ultimate consumer, and imported luxuries were necessarily very dear. Under these conditions smuggling became a thriving and profitable business all along the coast. Do you wonder that Spain lost South America in thus attempting to protect a "trust"? There is a good lesson in this.

CHAPTER XXIII.

ARGENTINA'S AGRICULTURAL PRODUCTS.

IN CONSIDERING how Americans could make money in this country, the opening I have in mind, and it is a big one, is the raising of pigs for breeders as well as for meat. The Argentinians are fifty years behind the times on pork raising. The farm laborers being nearly all foreigners accounts for there being so few small farms. The big ranches do not run stores, with "booze" as the principal stock, as do the *rancheros* of Chile. This tends to sobriety.

If Argentina had sufficient farmers she would soon become the food-producing country of the world, as there are 80,000,000 acres in the republic that will raise wheat and nearly everything in cereals and flax. I will give you the figures for the acres in crop for 1911-12: Wheat, 17,412,500 acres; 206,800,000 bushels. Corn, 7,700,000 acres; 308,000,000 bushels. Oats, 2,250,000 acres; 55,950,000 bushels. Flaxseed, 3,837,500 acres; 2,440,000,000 pounds. Add 2,500,000 acres for everything else grown, and you have 33,700,000 acres in crop, or but a little more than three-eighths, only about forty-two per cent, of the possible area under cultivation.

AN ALFALFA STACKER AT WORK
ON AN ARGENTINIAN RANCH.

And yet the Argentinian crops are at the present time regulating the prices of grain and cattle for the world. What will it be when this country is developed up to a point equal to the older countries? Stop and think!

The United States holds the position of being the greatest wheat-producing country in the world—700,000,000 bushels, with 93,000,000 people, while Argentina, with less than 7,000,000 population, holds the fifth place. Hence, you observe, that with eight per cent as large a population our Southern rival produces wheat in amount equal to about thirty per cent of what the United States produces. Argentina also produces corn and other products in proportion

There is certainly going to be no shortage of food in the world for the next century. The price of food will depend upon the amount of money in circulation. If there was only one gold dollar in the world you could buy everything for that one dollar; hence, if there is one hundred billion gold dollars prices will be one hundred billion times higher than if there was only one dollar. We need not worry about prices, only quantity and quality need disturb us.

TYPE OF YOUNG WORK-
MAN, ARGENTINA.

Thirty years ago, when the rush was on for the wheat lands in Minnesota, Dakota, Manitoba and the great Northwest, the cry was "Wheat! Wheat!" My dear old friend, T. W. Teasdale was then, as now, general passenger agent of the C., St. P., M. & O. Railway. His railroad served northern Iowa, Nebraska and Kansas, where corn was the chief crop. His passenger business was falling off, for everybody was headed for the wheat land.

Every homeseeker going to the Northwest passed through St. Paul and changed cars there, and as they always took a walk around while waiting for a train out, Mr. Teasdale hung out a huge banner near the St. Paul station, on which was inscribed in letters that could be read a long distance this warning: "*He who goes where Indian corn won't grow is a long way from home.*"

The tired farmer, cramped up in a homeseeker's coach for several days and nights, with his stomach bad from eating cold lunches (put up at home) and about ready to go back anyhow, was immediately impressed by this sign, and many went Southwest to find new homes where Indian corn as well as wheat would grow. Also, Teasdale saved a share of the traffic for his road.

Argentina has long been known to the people of the United States as a wheat country, but it is also a corn country. More corn is exported from Argentina than from the United States. This is true, largely, because the cattle are fattened on alfalfa and not on corn.

The soil is a black vegetable loam, and in many sections mixed with sand. The sand lets the air down to the roots of the alfalfa, which find water from five to fifteen feet deep. There is a larger percentage of arable soil in Argentina suitable for the growing of alfalfa than in any other country in the world.

The process of getting the alfalfa started is this: The owner of the land rents the raw land to a farmer, furnishing the seed, for a small percentage of the crop. The land is broken up, one, two or three crops of wheat or grain of some kind are taken off, then it is sown to alfalfa. The ranchmen who own the land are not the farmers, the latter being mostly foreigners, who are just getting a start in this country. They usually own a few horses, plows and farm machinery, but no land.

The land is not farmed as well as it would be if the owners were cropping it; this is shown by the average per acre. In the United States wheat averages thirteen bushels to the acre; here only ten. The thirty per cent greater yield we produce simply means thirty per cent better farming. In England the wheat yield is thirty-one bushels to the acre, and I believe

that in ten years from now the average yield in the United States will be twenty. This will be equal to nearly doubling our acreage.

Only one-half of the earth's surface, not covered with water, will produce anything on which man or beast can live, and only one-half of that is now occupied or used, and this land is only worked to about fifty per cent of its capacity. So, you see, there is still room for four times the population old Mother Earth now supports without crowding.

In Argentina, as is most new countries, when breaking up the sod for the first time, much of it is sown to flax, and at the present price the first crop frequently equals the value of the land. Oats sown in the fall come up quickly, and, on account of the mild winters, afford splendid pasturage for cattle for several months without injury to the crop, which is cut before wheat. No spring grain crops are sown, and while our winter-sown crops take about nine months to mature, all crops ripen here in six months after the seed is put in the ground.

There are just as many different prices for grain lands as there are grades, distance from market, improvements and other conditions considered. Good wheat land within two hundred and fifty miles of Buenos Aires, or one hundred miles from a port and near a railroad, can be bought for from eight to twenty dollars per acre; wild, unimproved lands bring from two to five dollars per acre.

I saw a farm of four thousand acres near the city of Buenos Aires, that was held at \$180 per acre. It had splendid improvements and part of it was in alfalfa. It earns twelve per cent on the investment. Money is not considered well placed here unless it brings ten per cent net. However, it must be remembered that only the eastern half of Argentina is suitable for grain; the western half is dry like parts of Arizona, New Mexico and California.

Near the mountains, where the snow forms little rivers that are used for irrigating the land, everything grows abundantly, especially grapes. All the land onto which water can be got has been in a high state of cultivation for more than one hundred years, and a good vineyard is worth thousands of dollars an acre.

In investigating the matter of farm machinery I found that less of it had been made in the United States than I had expected. The general complaint about our farm machinery is that it is too light and will not last. English makes are preferred, especially those designed for use in the English colonies, like Australia and Canada. One English thrashing machine will last as long as two from the United States. However, I found that the American-made windmills were favored and preferred on account of their strength and durability. The "Champion" road grader from the United States is in general use.

I think I have a surprise for those readers who are at all interested in farming; it was a surprise to me. In Argentina

CROPPERS AT WORK IN A WHEAT FIELD, ARGENTINA.

they cut, thrash and sack their grain for five per cent of the value of the crop, while in the United States it takes at least fifteen per cent. This interested me more than any other one economic subject in the country.

About four years ago there was introduced from Australia a harvesting machine and thrasher combined that requires only three men at the most to operate, and from four to six horses. It skins the grain out of the heads of the standing wheat, blows the chaff away and deposits the grain in sacks beside the machine as it moves along. It is called a "cropper." One machine will average ten acres a day, and costs seven hundred dollars delivered.

When the machines were first introduced they had not been perfected and were practically failures. Two years ago the makers (there are four makes and no monopoly) came back into the market again, and ever since the machines have worked so well that I did not hear of a thrashing machine or engine or other harvesting machine being sold since.

On one large farm, with thousands of acres under the plow, I found eighty "croppers." I saw the books that were kept on several large estates, and they all claimed they could not be induced to use any other harvesting machine, and that five per cent of value of crop is correct as to cost from standing grain to sack. I inquired if there was not considerable loss of grain that never reached the sack, and they stated that the loss was no more than in cutting, binding, stacking and thrashing. The more operations, of course, the more chances of loss.

They had trouble with weeds and thistles gathering on the teeth that skin the grain from the heads of wheat until a rake, worked by the man on the machine, was perfected in Argentina to overcome that defect. This improvement has been adopted by the manufacturers.

Just think of saving thrashing, twine, stacking, teaming and delays, to say nothing about extra labor! Three men can crop two to three hundred acres easily. Another saving claimed for this method is that there is no broken grain, as in thrashing. Of course the straw is left standing and cattle are turned in on it to get the benefit of this sort of grazing. When the remaining straw is trampled down it is plowed back into the ground.

The machine described can be used in a heavy wind and be effective on short straw, but not on "down" grain. It is effective with ninety per cent of all wheat, oats and barley, but is useless on flax.

The harvesting months in Argentina are December and January, and it would pay American farmers to club together and send a man to this country to look over the way they do things. The farmer here has one disadvantage—he is only a temporary tenant, moving on, as heretofore explained, every few years. Having little or no capital, he borrows from some of the Jewish banking houses in Buenos Aires, which

take his growing crop as security, and when the wheat is in sack, set the price. There are no local elevators to which the farmer can take his grain and get the cash, so he is at the mercy of the aforesaid Shylocks, who greedily "squeeze the life out of him."

All grains are moved to the ports for export in sacks, which is a big expense to the producer. Freight rates are reasonable, and the haul by rail, mostly in open "flat" cars, is never over three hundred and fifty miles to market at a seaport. The rich men of the country are the cattlemen, and their ambition is to get their land holdings into alfalfa or tame grass, and they do not want to sell the land.

BROOD MARES ON AN ARGENTINIAN RANCH.

Despite the occasional lack of rain the potato, root and fruit crops are usually abundant, and they raise two crops a year of potatoes and many other vegetables. A country does not suffer the extremes of hard times when it has a big potato crop, for, next to wheat, the potato furnishes more food for man than any one other product of the earth.

During the Spanish-American War I recall that I was on my dispatch boat, the old filibustering yacht *Three Friends*, about four miles out of Havana, two days after the battle of Manila. About dusk the *Machias*, a United States gunboat,

A PERCHERON STALLION ON AN
ARGENTINIAN RANCH.

coming up from the coast of Yucatan bound for Key West to coal, sighted us and sent a small boat to see who we were. During the day another vessel had wigwagged to them that there had been a battle at Manila, and when the small boat reached our side the boatswain cried out:

"Have you any word from Manila, or any potatoes? We have had no potatoes for two weeks?"

So you see that potatoes are sometimes considered as important as great battles.

CHAPTER XXIV.

RACIAL TYPES AND INDUSTRIES.

THE people of Argentina may be easily divided, so far as race is concerned, into four classes—pure Latin, Latin mixed with some other race, some other race without Latin, and the *criollo*. The latter element furnishes the picturesque part of the population. This division is, of course, without reckoning the aboriginal Indians, of which there are many varieties—most of them decidedly far from picturesque.

Naturally the Latins predominate, and all languages introduced into the country gradually disappear into the Spanish, the original tongue disappearing altogether with the third generation. There are but few exceptions to this rule, and there are even English and American descendants in large numbers

who speak nothing but Spanish, unless they have purposely studied English as a foreign language.

The representative of the third generation of Argentinians is of a distinctly different type from either his Spanish or Italian forefathers. He is taller, stronger, more industrious and less polite. The strong hold which football has taken on the youth of Argentina is proof of this, while cricket is played only by the recently-arrived English, with but few exceptions.

There is little to attract the attention in the ordinary male inhabitant of Buenos Aires and the smaller cities and towns. As a rule he is well clad, both as to comfort and appearance. He is not particularly polite as to the way he makes his way through the narrow, crowded streets, but he is not offensive in the way he elbows his way along. He does not resent it if you do the same and hold your own, and he would be extremely surprised if you resented it.

Workingmen in their working clothes, which might soil or incommode the ordinary person, keep somewhat aloof, and at certain hours extra cars are attached to the trams marked *obreros* (workingmen), in which they ride and pay half price; but they rode just as freely in these extra cars of their own accord, when they paid full fare.

It is not until you get into the country, where the masses of those who labor are *criollos*, that the Argentinian begins to attract your attention from a spectacular point of view. There, on the *estancias*, you come in contact with the *gaucho*, the Argentinian cowboy, pure and simple. He is a cowpuncher in every sense of the word, but strikingly different from the cowboy of the bigger republic up North. He is much smaller and more compact in build; he is of Latin origin, with perhaps a dash of Indian here and there. Most of them never touch hard liquor from one year's end to another, although even the *gaucho* goes on an occasional spree. When he does, he drinks *caña* (cane whisky), and most of it is about the most deadly drink one can possibly imagine. He does not chew tobacco, though he smokes strong Italian cigars, occasionally a pipe, and innumerable cigarettes. He is an inveterate gambler, but generally for small

stakes. He apparently likes chiefly the gambling part of it.

Like the North American Indian, the *gaucho* can and often does go many hours without food. When he does partake of food, he eats inordinately large quantities of meat, either in the form of *puchero*, a sort of boiled affair, with a coarse vegetable or two thrown in, or, as somewhat more of a luxury, an *asado*, which is mutton or beef roasted in front of a campfire.

A lamb is generally cooked whole, or in two portions. When the *asado* is ready each *gaucho* cuts off the portion he wants. He knows no other way of cooking, and often goes for days without bread with his meals. His greatest mainstay, however, is the *maté*—tea made from leaves of a tree that grows in Paraguay—which he boils the first thing in the morning, and without which he would be unfit for his day's work. Having had sufficient of this beverage in the morning, he will go all day without anything else to drink, or without food to eat.

Naturally the *gaucho* is an expert horseman, for he lives in the saddle. He is also very clever with the lasso, although his lasso is very different from that used by the cowboy of the

North. It is much longer and heavier in every way. There seem to be yards too much of it, and you wonder why it does not get in his way; but he has his own method of handling it, and it answers his purpose.

It is a debatable question as to which is superior in the handling of a steer, the American cowboy or the Argentinian *gaucho*. It seems to be a fact, however, that a single cowboy does what it generally requires two or three *gauchos* to accomplish.

Expert horseman that he is, the *gaucho* has his own ideas of riding. He does not use the regulation pommel saddle, but a *recado*, which is a kind of semi-rolled-up stuffed sheepskin. He uses this at night on the *pampa* as a pillow, while his poncho is converted into a blanket.

The *boleadoras*, a lasso with a ball attached to the end of it, which he used to carry, is now in a great measure discarded. It was a clumsy affair at the best and frequently blinded cattle and otherwise injured them. But the *gaucho* is always willing to give you an exhibition of his skill with the *boleadoras*, although he is beginning to recognize its lack of utility.

His sole weapon of offense and defense is the same long knife with which he cuts off his chunk of *asado* while enjoying the camp *table d'hôte*. He seldom or never carries a revolver.

This is the *gaucho* of today. Fifty years ago all sorts of stories were told of this class of men. There was one type of *gaucho*, known as *rastreadors*, who would have filled the Chicago small boy's heart with delight. *Rastreador* means "tracker," and luckless indeed was the criminal who had one of these men on his trail. He never gave up the chase. Only a few years ago, in 1902, the Government of Rioja actually employed ten *rastreadors* to hunt down the bands of cattle thieves that infested the provinces. It is said that they absolutely exterminated them.

There is yet another curious class of natives in the country, which is somewhat of a mystery to students of races. The men are called *chinos*, and the women *chinas*. They have straight, jet-black hair and, although darker in the face, possess almost the exact features of the Chinese. There is

the same slanting slit of eye, same formation of eyebrows, and, not knowing the contrary, one would be positive in identifying the Argentinian *chino* as a Mongolian of some sort. Most of their blood originally must have been Indian, but they speak nothing but Spanish and there are now no tribes of Indians that resemble them.

The men are very active in their movements, sly, and inclined to be dishonest in small things. The young *china* woman makes an excellent domestic servant. She is perhaps the finest nurse girl in the world, and she is extremely fond of children and never tires of attending to them.

All of the *criollo* natives, including the *gaucho*, are inordinately fond of music. They have a music of their own, which has a certain wild beauty that is very attractive to strangers. The guitar and mandolin are their favorite instruments, string music appealing to the *criollo* more than the reed.

When *gauchos* become old, and they have to be very old before they cease to work, they are generally taken care of by the *estancieros* in whose employ they have been. Often they receive a monthly pension, and an amusing story is told of how a lot of old, retired *gauchos* "went on a strike" for higher pensions and won out. The *estanciero* was so amused and astonished by the "nerve" and novelty of the "strike" that he granted the demand.

Argentina as a manufacturing nation can scarcely yet be said to be even in its infancy. The two great necessary minerals—coal and iron—are still lacking as natural products. Nevertheless, in those branches of industry where a determined effort has been made, success has attended the very first endeavors. As a striking instance of this may be quoted the footwear industry.

Fifteen years ago ninety per cent of leather boots and shoes of all kinds were imported into the country, notwithstanding, or perhaps because of, an exorbitant tariff. That depends upon your politics. But today, the import duty on all manufactured boots and shoes is forty per cent *ad valorem*, and nearly ninety per cent of the footwear sold in Buenos Aires is manufactured in the republic.

Much of the footwear sold here is now sold as of North

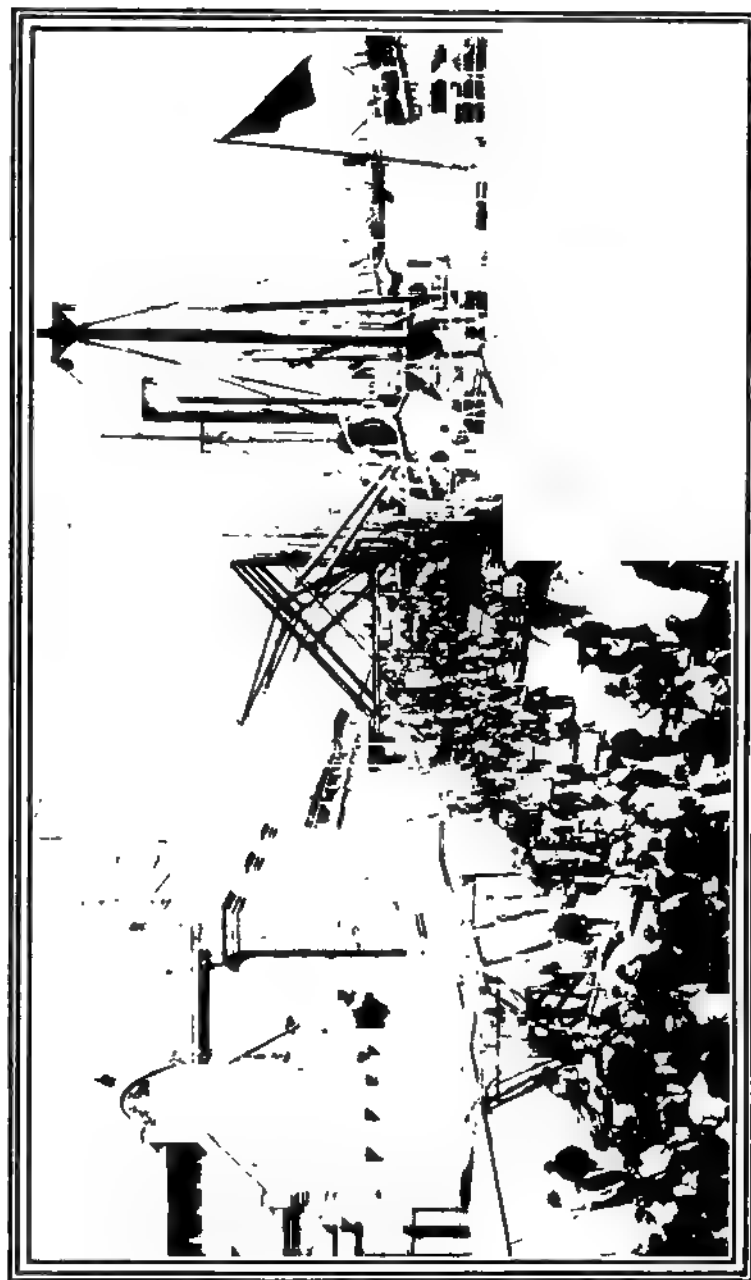
American manufacture, even to the extent of stamping the name of some fictitious factory of the United States upon it. But although not made in America, as claimed by the vendors, the articles are turned out by large and ever-growing factories that use American machinery and mold their work on American lasts.

In their Centennial Exposition of 1910 boots and shoes were turned out, finished in up-to-date style, before the eyes of the spectators, in half an hour, every portion of the work being done by American machines. But shoes made in the United States are still sold here, though on account of the tariff, at a high price, and there is now one large store in the most fashionable shopping thoroughfare of Buenos Aires, *Calle Florida*, which sells at retail nothing but one make of American boots and shoes.

For many years an enormous trade has been done in a loose, comfortable, soft shoe with rope soles and canvas tops, called the *alpargata*. They can be bought for one dollar in paper money (forty-five cents in United States money) per pair, and are worn exclusively by workmen and laborers. An astonishing lot of wear can be got out of a pair of *alpargatas*, notwithstanding their apparent lightness and flimsiness, and some of the better class of shoe dealers and furnishing stores have turned out a better form of *alpargatas*, which are worn by the well-to-do in the country and at the seaside. There is one *alpargata* factory in Buenos Aires which boasts it can make over 100,000 pairs a day.

There are one or two glass factories which are able to continue business, but the cost of imported fuel and material is a severe handicap to them, which is only partly met by the almost prohibitory tariff designed to protect them. During the time I was there, the first motor car manufactured in Argentina lumbered through the streets of Buenos Aires, bearing a large sign announcing its native origin.

There is one industry, however, that has so far been entirely able to keep pace with the natural production of the country, and that is the business of packing meat, the plants for which are here called *frigorificos*. The packing plants have steadily increased in size, number and productive power;



DOCK AND ENTRANCE TO CHICAGO PACKING HOUSE, LA PLATA, ARGENTINA, NOON HOUR.

so much so that the Beef Trust in Chicago has long had its "google" eyes on them.

Various emissaries have been sent to Argentina from time to time, all kinds of glittering offers have been made to the different companies, but only two plants (which were failures) in this country have, as yet, listened to the blandishments of the tempter from up North and sold out.

The plants referred to are the "La Blanca," situated in Buenos Aires, and the "La Plata Cold Storage," in or near the city of La Plata. The former is now considerably improved under trust management and has almost doubled its output. The latter is run on the principle of the packing plants in Chicago, and every possible *centavo* that can be made is extracted from every ounce of every animal that enters and leaves its doors.

To describe one of these plants is to describe them all, the only difference being in the locality and the daily output of each concern. The La Plata plant, said to be owned by Swift & Company of Chicago, or the Beef Trust, was so insanitary and dirty that the man in charge refused to allow us to photograph the interior. Labor, from unskilled to skilled, is paid from one dollar and twenty-five cents to three dollars and a half per day.

One of the great manufacturing industries of Argentina is the refining of sugar. The principal refinery is located at Rosario, and is owned by Germans and Argentinians. Most of the yellow sugar is shipped from Tucumán and the territory north of there. Two years ago it was necessary to import beet sugar from Germany in order to keep the factory running. The capacity of the refinery above referred to is 7,000 tons a day, or 700,000 tons for one hundred days. They operate only during the period in which cane is cut and reduced to brown sugar.

The price of sugar in Argentina is three times that charged in the United States, and the industry is only fostered by a prohibitive import duty. The people complain rather bitterly, as the sugar trust, owing to the tariff, makes an enormous profit. The territory that grows cane is quite limited and must be irrigated.

I was at one winery where they make 1,000,000 gallons a year. There are 910 *bodegas*, or wineries, in the province of Mendoza, and over 100,000 acres of land are in grapes, the land being worth \$3,000 per acre. The grapes sell for an average of \$500 per acre a year.

The Government tests all wine, and there must be twelve per cent of alcohol in the product—no more, no less. The annual output of wine for this province is 5,000,000 gallons. The next province for the grape is San Juan, just north of Mendoza. Many provinces produce more or less.

Flour and feed mills are located at convenient points, but the lack of power—water power being very far away, and all coal imported—makes cost of manufacturing flour too expensive.

Argentina is limited to agricultural and mercantile pursuits, and I do not see how it can become a manufacturing country. The total lack of minerals—even building stone—is quite a disadvantage, and the very high tariff imposed on everything makes living, except for the food products, very high.

CHAPTER XXV.

THE RANCHES OF ARGENTINA.

WHEN the first white man came to North America he found the Indians, the buffalo (wild cattle), the pony, and a great variety of game. Not so in South America. The first white people who tried to settle, about four hundred years ago, what is now Argentina, found the Indians, the *guanaco*, a species of llama or wild sheep, but no cattle or horses. The absence of wild game to live on had forced the Indians of South America to secure a living direct from the soil, instead of from animal life. This accounts for the advanced condition of agriculture and irrigation. The Spaniards brought cattle, sheep and horses with them when they attempted to make their first settlements in Argentina. The Indians massacred the whites, and their domestic animals escaped and lived and thrived in a wild condition on the endless *pampas* (prairies), multiplying by millions on the wild grass and sweet waters of this rich country and soon returning to their original natural condition.

Wild grass makes wild cattle. Tame grass makes tame cattle. The Indians, from seeing the first soldiers sent out by Spain riding horses, learned the use to which these animals could be put, so they caught, tamed, and broke many of them and used them to great advantage in their wars with the settlers or other Indian tribes. They became very expert on horseback. The half-breed *gaucho* (cowboy) of Argentina has had no equal, except in our own frontier cowboy of Texas, where the climate and topography of the earth's surface is identical with that found here. The same conditions produce the same results the world over.

I had the good luck to meet General Julio Roca, twice President of Argentina, and one of the wealthiest and most powerful men, politically, in the republic. He extended to me an invitation for a few days' shooting on his *estancia* (ranch) at

La Larga (meaning long). He has five *estancias* in different parts of Argentina. He was born on a ranch and has always been a great champion of the country as against the city. When elected President the first time, in 1880, he had to fight his way into Buenos Aires, and for a while established the capital outside the city. A President cannot, according to the constitution, succeed himself. His second term was served only six years ago. He is now sixty-seven years old, and a wonderfully well preserved man, with many years of usefulness ahead of him.

The La Larga ranch is two hundred and fifty miles southwest of Buenos Aires, where twenty-five years ago only wild, unconquered Indians lived. The Government established a fort here, and General Roca opened up the country. This ranch is about twenty-two miles long and ten miles wide. Its name, "La Larga," comes from its being twice as long as it is wide. It contains over 140,000 acres of very fine grass and farming land, and is said to be a good sample of an average cattle and grain-growing farm in Argentina, where nearly the whole country is divided up into what we would call very large estates. The real *pampas* of Argentina are about fifteen hundred miles long (from 24 degrees south to 45 degrees south), and from five hundred to seven hundred miles wide. It is known as an "ocean of land," and is treeless, except where planted by the owners. There is not a big hill or heap of stones to break the monotony.

There is little or no song-bird life. It is the kingdom of silence. It is the backbone and wealth-producing section of this wonderful country. It is to Argentina what Illinois, Kansas, Iowa, Nebraska, Texas and the Dakotas are to the United States and exactly similar in products, climate and appearance. There are many rivers and the country is well watered, the average rainfall being about the same as in the United States. However, as in the United States, they have "dry years," and certain sections in 1909 and in 1910 were quite dry, shortening the crops of wheat and corn and leaving little pasture for the cattle, which helped keep up prices of grain and cattle in the United States. The meat, wheat and corn producing sections of the United States and Canada may just as well realize

now as later on, that Argentina is the country that will set the export price and that Argentina controls our home market price for agricultural products, and that here equally as good land as we have in the United States is still selling for from only five to twenty dollars an acre in the older settled parts. This is a serious proposition, but we must face it. Land in the older and better sections of the United States is selling for the same price as equally good land in England, France and Germany, and we have the difference of freight against us in reaching the markets of the world.

In the year previous to my journey to South America I motored over ten thousand miles in Germany, France and England, and made inquiry everywhere as to prices of land, finding practically no difference between the three countries mentioned and the United States. We must realize, as the Minister of Foreign Relations (Secretary of State) for Argentina said to me: "The United States of North America is now an *old country*."

But to return to La Larga and my personal experience. I left Buenos Aires one evening by the Southern Railway on an electric-lighted solid Pullman train, and the next morning was met at the station, called La Larga, by Mr. Allendo, general manager for General Roca. He was accompanied by the assistant manager, Mr. Walter Hamilton, a Canadian from New Market, Ontario, Canada. Mr. Allendo has been in charge of this ranch for twenty years; he also has a large ranch of his own in the province of Cordova, three hundred miles north, and is

said to be worth \$500,000 himself. He has seven sons, and proposes to educate them in different countries of the world, one in the United States, one in England, etc. Mr. Hamilton is a graduate of the Agricultural College of Ontario, and is making commendable progress in this new country.

There are three railroads and three stations on this big ranch. I was driven to the General's residence in a carriage, such as we use for going to the opera in Chicago, by a coachman in livery, behind as fine a pair of horses as I ever saw. After a breakfast such as you would sit down to at the Waldorf in New York, I was driven through a thousand-acre park, set out with hundreds of thousands of trees. I was shown the kitchen gardens, where all kinds of vegetables were still growing, although it was late in the fall in Argentina.

My secretary, as well as my photographer, had preceded me by two days and had taken about forty photographs, all of which I wish I could show the reader. We then started to look over the ranch, and four magnificent horses were hitched to a coach and we set out for one of the smaller ranch houses for lunch. Over fifty miles of roads have been made on this ranch by a United States "Champion" road grader, and although it

had been raining, the roads were so well "crowned" and drained it was almost dusty.

The first stop made was to visit one of the schools supported by General Roca for the children of his two hundred employés. You never saw a cleaner, brighter-eyed, keener-looking lot of youngsters in your life. One thing that struck me as odd was that they all studied "out loud." The noise, to one not accustomed to this, was awful, but I presume it's all in getting used to it. They sang for me the national hymn and recited in a way quite creditable to any public school.

Next we witnessed the branding of some mule colts. Then we went on to the great concrete dipping trough, through which the cattle are driven when they need it. One thing I noticed was that all bones of animals that died on the ranch were gathered up into a pile and burned. This, Mr. Allendo told me, prevented disease among the cattle, as they would bite the bones for the salt, and contract sickness.

Another thing that impressed me very much was the fact that when all those big farms are divided up and sold to small holders, some day, and public sentiment is now facing this condition, the men who have worked on these big *estancias* will

A DROVE OF ARGENTINIAN CATTLE

have had the benefit of first-class schooling and training in how to do things right and will owe their future success to such men as General Roca, Mr. Allendo and Mr. Hamilton.

When we arrived at the "lunch house" I found it to be quite an establishment, where forty men were dining in a big room, supplied with a meal that one would pay a dollar for in the United States. A man cook was in charge of the kitchen. These men on the ranch receive from twenty to thirty dollars a month, the year round, and their board, and when married are furnished with a house free and food for their families as well as themselves. The men are sober, save their money and buy land whenever and wherever a big estate is broken up, which is not uncommon now.

I was surprised to find, when I sat down to a bountiful lunch in a large, clean dining-room in a big farmhouse, that, thinking I might be particular as to how I was served, they had sent over Charlie, my personal servant, fifteen miles, to wait

A FLOCK CONTAINING THOUSANDS OF

ON THE WIDE PRAIRIES AT LA LARGA.

on me at the table. Charlie enjoyed the ride, I knew, and I appreciated the trouble to which they had gone. After lunch we took some photographs and returned to the residence, which contained every modern comfort. There I enjoyed a bath in a six-foot bathtub, in a room 10x20 feet, with tile floor, walls and ceiling. There were four such bathrooms in this house.

General Roca was subdividing this ranch, as well as his others, I was told, into five parts, and improving each separately for his five children—one son and four daughters. The big thousand-acre park at La Larga he will present to the Government for a forestry station to demonstrate to the public what can be done in a few years with trees on the prairies of Argentina, and thus prove what has long been his hobby. He has over 400,000 trees on the La Larga *estancia*, most of them only ten years old, while many are only two years old. The favorite tree, which does the best and reaches a height of fifty feet in ten years, is the eucalyptus from Aus-

tralia. A thornless variety of the acacia does well and soon furnishes shade. Fruit trees grow well, as do many other varieties.

Of the 140,000 acres in this ranch, 20,000 acres were in crop. Oats are sown in the fall, come up quickly and the cattle graze on the fields. No hay is put up. This crop comes in and is harvested before the wheat.

On this ranch I found 30,000 head of cattle, mostly Durham. A good fat steer weighing 1,300 pounds, live weight, will bring \$50 gold. Of course there is only a small percentage of this grade. They are seldom fed grain. Much of this ranch has been put into alfalfa, which the cattle eat down close by

SPECIMENS OF BEEF CATTLE AT LA LARGA.

fall and during the winter. The cattle thrive and fatten on the alfalfa plant, which grows well on nearly all Argentinian ranches, as the roots reach water at from five to fifteen feet.

The second great source of national wealth is the pastoral industry; cattle, horses and sheep are the leaders. In 1909 the census showed 29,116,625 head of cattle, principally Durhams and Herefords, in Argentina, and 69,438,758 in the United States. Of horses there were 8,531,376 in Argentina, with 21,216,888 in the United States. In sheep, Argentina led the United States, having 67,211,758, mostly Merinos and Lincolns, while Uncle Sam could show in the same year only 61,837,112. There are quite a number of mules bred from pure Spanish jacks. In some sections goats are raised for their skins. The

total value of live stock of all kinds in the republic is over \$1,600,000,000.

On the La Larga ranch General Roca has 20,000 Lincoln sheep and 5,000 horses. He breeds mostly Percheron horses crossed with well-bred native stock, which produces a good-sized, quick, strong and clean-looking animal. Here I found over 5,000 ostriches, from which they get an average of two dollars' worth of feathers a year, and they are no trouble to look after, but each ostrich eats as much grass as a sheep.

The system in Argentina is to fence everything. On one ranch I found four hundred miles of wire fence. Only the top

TYPES OF HORSES ON THE LA LARGA RANCH.

wire is barbed. Around all groves of trees a fine wire is used to keep out rabbits, or hares, which are a pest in some localities. When we were hunting on the La Larga ranch we shot them until we grew weary. A three-horse wagon followed us all day, and the box was full at night.

The *martinetta* is about the size of our prairie chicken, possibly a little larger. It is a swift flyer and makes a hard shot when off, but is hard to get up. It is marked more like our pheasant than grouse, and has dark red wings, being a very handsome bird. Another game bird, called the *capetone*, has a beautiful topknot, and is handsomely marked. It is about the size of a young prairie chicken, is gamy and a good flyer.

They have also what they call a quail, but it is about the size of the partridge of the Southern States and twice the size of our bob-white. It is a "runner," but makes a quick get-away when it rises.

There are few hunting dogs in the country, the system used being to take about one hundred yards of wire with a horse at each end and drag the ground. The sportsmen follow the wire on foot. The coaches, and horseback riders to gather up the game for the wagons, are always on hand. Every minute there is a hare or bird to shoot at, and when you get tired of shooting and walking you get into the coach, drawn by four horses, and ride awhile.

I would be
ashamed to tell
how many shells
I shot; anyhow,
over two hundred a day, and
the reader
might think me
boasting if I
mentioned my
bag. It was the
best few days'
sport I ever
had, or expect
to have, and I
have had a few
and hope to

WHEN WE LUNCED ON LA LARGA RANCH,
ARGENTINA.

have a few more in the future—in my own native land.

It now became my duty to take my last look at Argentina, and to say farewell. For nearly three months I had carried a card from the chief of police of the city of Buenos Aires that protected me from arrest under any circumstances or for any crime. From the President down to the most lowly citizen, every opportunity possible had been afforded me to gain correct information about conditions as they really existed. The clubs and hotels had treated me as a real guest, and not as a transient customer. The merchants, and those

with whom I did business, took my money as if they needed it and charged what seemed a high price for their wares—but no more than others paid.

The newspaper fraternity treated me like a brother. There are a lot of big men in the profession in Argentina and they aided me freely in every way. The railroads could not have treated me better had I been the President of the United States or an ambassador. I was not only put over the road “in comfort”—which means a private car—but had the assistance of every division superintendent in securing entrance to factories, ranches and public and private places. This aided greatly in saving time. It was not from Buenos Aires that I got my view of Argentina, but from 13,000 miles of travel, principally by railroad and river.

Argentina, I am glad your railroads pay, and that capitalists of the United States have been lately investing in your stock. To the United States legation, and the good friends I made, who invited me to their homes and made me welcome, I owe a great debt. I shall never forget your generous hospitality, and while I may never be able to repay you in like manner, I will try to pass it on to some one else. From the bottom of my heart I thank you.

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PARAGUAY

Area, 157,000 square miles, or a little larger than the States of Iowa, Indiana and Illinois combined. Population about 500,000—Chief resources, maté (Paraguay tea), tobacco, cattle, timber, oranges—Total exports and imports in 1910. \$9,800,000—Exports to United States in 1911, \$34,516, imports from the United States, \$86,986—Army, estimated at 2,600, but varies according to the size of the revolution that may be under way—Capital, Asuncion, population, 80,000.

CHAPTER XXVI.

INDIANS, SPANISH, DICTATORS, RESULTS.

GOOD climate, soil and transportation, are the three great factors in the development of a highly civilized race. The exception to this rule, world-wide though it be, is Paraguay. Read the answer in the history of the country. I will only attempt to give a short review of leading events, in order to bring the reader down to the present, and then enumerate the net results.

Before Columbus discovered South America, the whole country was inhabited by Indians. Those who occupied what is now Paraguay, were and are called the Guaranies, and the country Guayrá. The Indians living in the rich, fertile country east of the Paraguay River were peaceful and tilled the soil and lived on tropical fruits. Those west of the same river occupied what was supposed to be inaccessible swamps, and were wild and nomadic in their habits. This country west

A WOMAN SMOKER IN
PARAGUAY.

of the Paraguay River, known as the Chaco swamp, has lately proved to contain much fine grazing land.

In 1526 Cabot, searching for the center of South America, from whence all the gold was supposed to come, came up the Paraguay River and stopped at an Indian village, where Asuncion is now located. He did not go farther north, as he was out of provisions, but returned home unsuccessful. However, he reported the Indians in these parts of South America as peaceful and not warlike. This in itself was a great discovery.

In 1533 Mendoza received from Charles V. of Spain a large grant of land, from the Rio de la Plata south, if he could take it from the Indians and hold it. He arrived the same year where Buenos Aires is now built, with 2,000 men. The Indians refused to give up their homes peaceably, and also refused to furnish food for the foreign invaders, who nearly starved. Neither did the Spanish appreciate being picked off one at a time if they left their fort. This was not fair, so those left of them at the end of a year came on up the river, first to Cabot's old fort, then on up the Paraguay River, and established the first real white settlement, in 1536, at Asuncion. There is no prettier or better site for a city in South America. The ground rises in a gentle slope from the river, affording excellent drainage. If you will take the map of South America, and start at the mouth of the River Plata, and follow up that river to where it is formed by the Paraná and the Uruguay Rivers, then on up the Paraná River, to where the Paraguay River comes into it, and then up this last-named river for 150 miles, you will be at Asuncion, the capital city. If you were to go on up the Paraguay River for two hundred miles more, you would be in Brazil, where this river has its source. As I stated in the beginning, good transportation is necessary to the development of any country and race of people. These three rivers, the Plata, Paraná and Paraguay, furnish a navigable water course for large ships, drawing at Asuncion ten feet of water, and more as you pass down the river, until you come to Santa Fé, where you may see ocean-going vessels berthed.

These rivers are so wide that sailing vessels successfully navigate the course. From Buenos Aires to Asuncion, 700

VIEW OF A PORTION OF ASUNCION, PARAGUAY.

miles as the crow flies, is over 1,000 miles by the river. A Chicago newspaper correspondent, who had never been on or up the river, wrote a letter for his paper, some years ago, describing this "chain of rivers" as being navigable for big war vessels for 2,000 miles, and this article was read into the *Congressional Record* at Washington, making it official. It was not true, and caused much trouble, as the world accepted it as true, because it was "officially" published.

Paraguay cannot lay her uncivilized condition to a lack of connection with the outside world, nor to her climate, soil or products, but to a chain of circumstances unique in the attempt to develop a nation.

When all that remained from the Mendoza expedition reached Asuncion, they concluded to re-

main, and took Indian women for wives. During the next seventy-five years the country thrived and grew, and the half-breed children, called *creoles*, made many settlements over that part of Paraguay east of the river of the same name. The descendants of these *creoles* are now the "old families" of the republic. They were mostly cattle people. They were so far from Spain. they paid little attention to Spanish laws or rule, but got along very well among themselves, and the half-slave Indians, who did the work for them. Since the appearance of the first white man the Paraguayan Indian had been accustomed to take his orders from him. About the year 1617, however, the

ASUNCION, PARAGUAY, VIEWED FROM THE HARBOR.

Jesuit priests having been driven farther west from the Atlantic coast, began to introduce their customs and religion, and to make attempts at civilizing the Indians.

From 1580 to 1640 there was no well-defined line between Portugal and Spain as to their South American possessions, and during this time the King of Spain was monarch of Portugal. So the Jesuits, who held a royal letter, given during that period, to convert the Indians of Guayrá—the name given this country thought they were perfectly safe, and “had it right going and coming.” The Jesuit fathers gathered the Indians into villages and had them build churches for them and cultivate a little land near the villages. They were kind to the Indians and did not teach them the practices of war, but peace. By these means tribal wars were prevented, and the population

A PARAGUAYAN SOLDIER

increased very fast. However, the *creoles*, or land owners, were by the acts of the Jesuits deprived of the labor of the Indians, as the Indians preferred to work for the Jesuits, and like two labor unions, the *creoles* and the Jesuits were always at “outs” with one another.

The Jesuits were great organizers, hard workers and represented a degree of civilization never since reached in Paraguay. Their worst enemies, however, were the Paulist order of monks, who had driven the Jesuits from São Paulo, Brazil. The Paulists desired to take slaves, teach the Indians war, and create an army out of them for offense and defense. As the Paulists were always armed they had no trouble in breaking up the settlements of the Jesuits, who were defenseless. The latter only scattered until the fathers got them together again. This three-cornered fight, between the *creoles* and the two orders of the Church, kept up for more than a century, costing many lives and holding the country back. At last the Jesuits armed their Indians, and as the Church had taken sides against them, they did business on their own account, and were quite suc-

cessful. They threw out not only the Church, but the Spanish Governor, nearly one hundred years before the first republic in South America was established. In effect, they established the first republic in a country which now forms a portion of the so-called Republic of Paraguay.

In 1769 the King of Spain banished the Jesuits from South America. At that time they had 200,000 Indians under their command. They did not resist. They faded away and the country returned to a state of chaos. The Spanish officials, who replaced the Jesuits, were very cruel to the Indians.

There was a Spanish Governor at Asuncion, and Belgrano, the enthusiastic Argentinian general, set out to establish a republic for Paraguay. With a small army, not expecting resistance, he got within sixty miles of Asuncion, where he was met by the Paraguayan soldiers and defeated. He escaped, but part of his army fell prisoners and were held in the country, where they told their captors about the advantage of a republican form of government. The result was a revolution, and a bloodless one, for the Spanish Governor had no soldiers and Spain was helpless to aid him. So he stepped aside and became a private citizen.

After a good deal of fuss with their new-fangled freedom, a sort of Congress was held. General Yegros, an ignorant soldier, and Francia, a wise and learned lawyer, popular with the people, were selected to rule. After much trouble brains succeeded over bullets, and Francia was elected sole executive, and in 1816 declared supreme and perpetual Dictator. For the next twenty-five years he was the Government of Paraguay, and the people minded their own business. If they attempted to interfere, they were executed. This con-

dition under Francia was not so bad. He refused to accept any money, except his bare living. He refused all presents, or, if he kept them, sent the donor their value in cash. He kept no books; not a single Government record was found when he died.

He knew that his power depended upon the friendship of the Indians, and he saw that strict justice was done them. The *creole*, white man and priest, were no friends of his. He did not allow them to speak his name. He was referred to as *el Supremo*. When he ordered a man executed, as soon as it was accomplished the order was returned to him and torn up. Foreigners were not permitted to enter the country without a special permit. He neither received nor sent ministers or consuls to foreign countries. He was the only merchant, not for himself, but for the State. Two-thirds of all the cultivated land was worked by the State for the benefit of the people. The people were forced to furnish the labor. No foreign ships were allowed on the Paraguay River. He was very morose and quiet, never talking to any one. Afraid of Brazil, Argentina and Spain, he built up an army and organized the whole population on a defensive basis. When he died, seven hundred unexecuted political prisoners were released. The country had prospered under his rule, and they had enjoyed the benefits of peace and justice. Yet they had not improved otherwise. He was the kind of man necessary to govern the kind of people he had under him at that time. He died at the age of eighty-three, having been ill only three days. He never married. When asked to appoint a successor, he said: "What's the use? Only the man who can hold down the job can rule."

After several months of chaos, during which the army got tired of putting up and pulling down would-be rulers, the people tried to elect another Congress, and they did elect again two rulers, but in the end one of the two forced the other out and left as Dictator Lopez I. He was a farmer-lawyer, who, while Francia was alive, knew enough to be quiet and keep his head on his shoulders. He succeeded to all the absolute power of the first Dictator. He was a pretty decent sort. He freed all negro children born. He tried to frame a constitution, and he catered to foreigners. He wished for recognition by the other

THE CATHEDRAL, ASUNCION, PARAGUAY.

A CITY OF THE DEAD IN ASUNCION.

Governments. Permission was granted to foreign ships to navigate the Paraguay River as far as Asuncion. Foreigners were permitted to enter the country, and trade with them was encouraged. Asuncion erected many modern buildings and resembled other capitals.

Lopez I. objected to the shedding of blood. Justice was administered and life and property were safe. However, he was Dictator, and no one could have anything to do with the Government but himself and family. He loaned money to an American to bring a colony to grow tobacco, but got into a fuss with him. The *Water Witch*, a United States navy boat, appeared. He then forbade foreign war vessels the use of his

rivers and harbors, and fired on the *Water Witch*, killing one man. The United States demanded cash and an apology, and got both. After that Lopez I. turned against foreigners, and many were the resulting complications. He then began to prepare his country for foreign invasion. He had three sons; the oldest, Francisco, he trained for his successor.

A COUNTRY MANSION IN PARAGUAY.

Francisco was Minister of War. The other two sons held Government positions. They were all very wild and reckless. They took as many mistresses as they desired and enriched themselves from the public treasury. After eighteen months in European capitals, Francisco returned with a French mistress and a "swelled head." His father died in 1862 and Francisco Lopez became Lopez II. Poor Paraguayans, what did you ever do that you should be called upon to suffer so?

There is no doubt that the French mistress of Lopez II. saw that her only chance to get away with a big lot of money would be in time of war, and so she urged him on to bring about war with Brazil. This resulted in war with Argentina and Uruguay at the same time, as he attempted to march his army through those countries without their consent. At the beginning of

this war the population of Paraguay was about 700,000; at the close it was 200,000 women and 25,000 old men and boys.

The world's historians usually talk about how brave the people were, and how they died for Paraguay. I do not believe they were brave. They were driven to battle, and each soldier had orders to shoot any man who ran. Surrounded by executioners, it was pure cowardice that kept the soldiers in the firing line. I changed my mind about their bravery after I arrived in their country. They never had anything or anybody to fight for, except a Dictator, whom they never loved, and only feared. After the death and surrender of Lopez II. the allied armies remained in Paraguay. The Brazilian army remained seven years. Such a thing as honor and virtue became practically unknown. There were few marriages, ninety per cent of the children being illegitimate, and at the present time one sees many black-faced Paraguayans. From this stock, and the sailors who visited the river ports, this poor country has been repopled. One should not expect too much of them.

President Albino Jara, the Dictator while I was there, was the illegitimate son of a market woman and an Argentinian soldier. He was cruel, uneducated, except in the drill of soldiers, and made himself Dictator by practices not allowed in warfare of the present day. He held his position only through the power of the army, and copied after Lopez II. He was overthrown and lost his power in another revolution, a few weeks after I left Paraguay.

CHAPTER XXVII.

LOPEZ AND LYNCH.

IT IS asserted that for brevity nothing equals the story of the creation of the world, which is told in six hundred words. There is nothing remarkable about that, because at the beginning there were only one man and one woman. Had there been one thousand men and women it would probably have taken six hundred thousand words.

In treating the history of Paraguay, past and present, I am going to break into the middle of it and work both ways, so you may better understand cause and effect. There is always a "reason why" for everything, be it good or bad, and Paraguay is really bad. I know at the start that it is going to take more than six hundred words to tell the story of Paraguay, but

it is an interesting narrative, and the more I go into detail the better you will like it.

Asuncion, the capital of Paraguay, is possibly the oldest continuous settlement in South America, as it dates from 1526. The early history of this country is as reliable as South American records will make it, but the history of the past century is largely hearsay. Few writers have visited this country, and no records or books were kept from 1811 to 1850 by the first two Dictators, De Francia and Carlos Antonio Lopez, known as Lopez I.

Forty years ago the world was startled by one of the most celebrated lawsuits ever tried before a Scotch jury. This lawsuit brought to light, through the sworn testimony of reputable American, English, French and South American men and women, present in Paraguay during the long war with Brazil, Argentina and Uruguay, the practices of a despot, who masqueraded under the title of President of a republic (which had never existed in fact), and the horrible conditions that existed in that so-called republic during a long-continued reign of terror.

Francisco Solano Lopez, who succeeded his father as President in 1862, and known as Lopez II., the Dictator, was constantly accompanied by his favorite mistress, Madam Lynch, a prostitute he had picked up in Paris, who not only counseled and advised him, but absolutely controlled him. History presents no parallel to this case in crime—murder, robbery, intrigue, and the wrecking of a whole nation for a wanton woman. The historic love affair of Mark Antony and Cleopatra seems heroic and beautiful when compared with that of Lopez and Lynch.

Madam Lynch, through her position and influence with Lopez, could command the life and property of any person within the reach of the Dictator and his minions, whether citizens of Paraguay or foreigners—and she ordered executions and confiscations at the whim of the moment. Among others who fell under her displeasure was Dr. Stewart, the Scotch surgeon-general of the army. He had married a wealthy Paraguayan woman, a member of one of the old

Spanish families, who refused to recognize the mistress of the Dictator as the first lady of the land.

It is said that "hell hath no fury like a woman scorned," and the worse the woman the more is she to be feared. Refusal to bow the knee to Madam Lynch was enough to merit death, which fate might be staved off indefinitely if the marked victim could produce a large sum of money as often as the

Madam thought it should be forthcoming.

As fast as Dr. Stewart, through the estate of his wife or otherwise, could get together a few thousand dollars, she demanded his money or his life. Well, a Scotchman hates to part with these, especially his money, and the time came when he absolutely refused to give either. He left the country and went to Edinburgh, where in 1870 he was sued for payment of a draft for \$20,000, which he had given to Madam Lynch while living in Paraguay. He resisted payment on the ground of intimidation and no

MADAM LYNCH AT THE AGE OF TWENTY.

value, and won out, but the suit brought to light the terrible conditions that existed in Paraguay during the reign of Lopez and Lynch.

Dr. Stewart was somewhat of a soldier of fortune, having been a first-class surgeon with the rank of captain in the Crimean War of 1855, and later was sent out by the English War Department to the River Plata and Argentina on a commission in 1856. In 1857, with the consent of the English Government, he accepted a position with the Paraguayan Government to organize a military medical corps and medical college at Asuncion.

In June, 1864, when the long war broke out, he was made surgeon-general and had ready one hundred trained surgeons prepared for active duty in the field. He was the first doctor or surgeon outside of Edinburgh to use the Lister antiseptic, which is now in common use the world over in surgical operations.

Dr. Stewart is now eighty years of age and lives in a lovely big park on the edge of the city of Asuncion; he is still quite active, and is so popular that he still continues his practice, although he has large estates. I had a letter of introduction to

him, and was most cordially received and entertained. He recounted much of the history of the *régime* of Lopez and Lynch, but said: "I want you to get your story from the sworn statements of witnesses at the trial, a copy of which I have, as printed in the court records."

I read the entire proceedings of that historic trial, and from the records have condensed sufficient of the testimony to show how awful the conditions were in Paraguay from 1862 to 1870. The first witness was the Hon. Charles Amos Washburn, formerly United States minister to Paraguay. (Mr. Washburn's brother was afterward Secretary of State during President Grant's second administration.) Mr. Washburn swore:

"Lopez was a tyrant so absolute and cruel that everybody lived in perpetual fear. Several Americans, in fear of their lives, took refuge in my legation. I was called upon by Lopez to give them up, but refused; however, they were taken by force and shot. I thought it very doubtful if I got away with my life. I did not think they would publicly execute me, but I felt sure that they would assassinate or poison me, as my wife had refused to meet Madam Lynch, Lopez's mistress, who presided over Lopez's household and social entertainments.

"Many of my official telegrams and letters to Washington were taken by Lopez and never got out of the country. I knew Dr. Stewart, having met him when I first reached Asuncion in 1861. He was the surgeon-general of the Paraguayan army. I did not know Madam Lynch; she was the favorite mistress of Lopez. She was a woman of great self-control and avaricious; she was very false and an awful liar. She was as bad as she could be!"

The judge asked: "Could Dr. Stewart at that time have refused to sign a check for her?"

Answer—"No. Neither Dr. Stewart nor any one else, except at the risk of his life. Dr. Stewart was not a favorite of Madam Lynch. He told me he gave her a 'bill of exchange.'"

The next witness was George Frederick Masterman, of London, who testified as follows:

"I went to Paraguay in October, 1860, as chief military

apothecary. After the death of his father, Francisco Solano Lopez became President. Many influential people were arrested by his orders and put into prison, where they died from torture, starvation or poison. The war with Brazil broke out in 1864, and after the first defeat Lopez declared he was surrounded by traitors. Many arrests were made and the tortures inflicted were terrible. The flogging was done by corporals, each giving ten blows, and from one hundred to two hundred blows were given each victim on the bare back. The greater number of those flogged died afterward.

HOUSE IN ASUNCION ONCE OCCUPIED BY MADAM LYNCH, NOW
USED AS BARRACKS.

"I was very close to Lopez and knew him very well. He was very suspicious, and any one he suspected was doomed. He was very ambitious, and never changed his mind. Every person about him seemed to spy on the others.

"I knew Madam Lynch, who was one of his mistresses; she had great influence over Lopez, and always spoke against Dr. Stewart to him, telling him, among other things, that Dr. Stewart had tried to poison him. It was very dangerous to fall under the displeasure of Madam Lynch or Lopez, and the

only way to avoid the greatest cruelty was to comply with their wishes at once.

"I was arrested in 1868 on the allegation that I was a conspirator against Lopez, at the same time that United States Minister Washburn was accused. Over eight hundred men, women and children were arrested, mostly all from the best families, who refused to meet or recognize Madam Lynch. All of them, with the exception of six or seven, perished in some way. The judge was Father Roman, a priest. I was flogged, but I told him I was innocent.

"He advised me to confess anyway, but I refused. He then called upon the soldiers to come with their muskets. My knees were drawn up and a musket placed beneath them; then he put his foot on the back of my neck and forced my head down to the musket, and another musket was placed across the back of my neck and tied to the first. Being thus completely doubled up, I was again urged to confess, but on refusing I was released, only to be subjected to even greater torture by being bound to three muskets. Again I was urged by Father Roman to confess, and being almost dead, and knowing that even worse torture would follow, I concluded it would be better to make a false confession than to die such a miserable death.

"Dr. Stewart was also forced to write a letter accusing some people of being concerned in the conspiracy. People were forced to sell their property to Madam Lynch for paper money that was worth nothing, to save their lives. She printed all the money she wanted and everybody had to accept it. I personally know several people who were so coerced. Dr. Stewart told me of Madam Lynch's demand for a bill of exchange for \$20,000, and I advised him to give it and save his life. The country when I escaped was utterly devastated and reduced to great misery."

On being interrogated the witness said: "Yes, I knew of the poisoning of Mr. Atherton, the British merchant, who was suspected of being connected with the conspiracy against Lopez. Some of the ladies of the better class made presents of rare lace and jewelry to Madam Lynch, thus securing the release of members of their families from prison."

An important piece of evidence was a deposition by Señora Juana Inocencia Lopez de Barrios, a sister of Lopez, which was substantially as follows:

"I was married in 1856, and my husband was a colonel in the army. He joined the troops in the field after the war began with Brazil, Argentina and Uruguay. He was arrested and put in prison in 1868 on the false charge of corresponding with a Brazilian officer. He was horribly tortured in prison because he would not confess the charge was true.

"Whenever my brother was defeated in battle he always claimed some one had betrayed him and that he was surrounded by traitors. The officers and others thus accused were nearly always members of the families that refused to recognize Madam Lynch. I was imprisoned by my brother, the late President, because he said Madam Lynch told him I had favored my brother Marshall for President. I always believed she invented the charges against my husband and brother because our family could not recognize her. My husband, my brother, Benigno Lopez, and others were shot in my presence by order of my brother, Francisco, the President.

"My brother Francisco brought Madam Lynch to Paraguay in 1856. Her bad reputation had preceded her. She employed all her influence to involve the country in war and worked incessantly to demoralize the people. While drunk she would dance in the public plaza with the common people to popularize herself with the lower classes. My father, who was the President, did not recognize her. I think his hatred for foreigners had its beginning here. After his death and my brother became President her influence became very strong. Everybody feared her. She was ambitious and greedy. She said a fortune teller had assured her she would be a queen some day.

"I was put in prison with my sister Rafeala, being badly treated and terribly tortured; I was released to see my husband and brother shot, and then rearrested and kept in prison until January of this year. Only two months before our escape, my brother, sister and myself were arrested and put in prison. It is my opinion that Madam Lynch invented the story of Dr. Stewart's attempting to poison the President.

"She had Pancha Garmenda, a most respected young lady, lanced to death; my brother admired her, and Madam Lynch was jealous of her as a rival. Neither position nor innocence could shield any person from her vengeance. Madam Lynch forced my mother to give her 1,000 ounces of gold, which she

TOMB BUILT BY LOPEZ FOR HIS OWN USE,
BUT NEVER FINISHED.

gave General MacMahon, who succeeded Mr. Washburn as United States minister."

Interrogated—"Did any respectable people associate with Madam Lynch?"

Answer—"Yes, later on, through fear of her vindictive

character. Most of the best families had been wiped out of existence. Every member of my husband's family and my own, except my mother, sister and self, had been either flogged or lanced to death, or shot.

"Dr. Stewart was married to Señora Venancia Triay, one of the richest heiresses in Paraguay, and by his marriage to her became owner of several large and well-stocked *estancias*. No married woman owns property in Paraguay."

Interrogated—"Why did your brother, the late President, not marry Madam Lynch? I believe it has been testified that they had five children which he recognized."

Answer—"Because she was already married and has a husband living, who is a surgeon in the French army. Another reason would be that she could own no property if married to my brother, and he has placed millions in her name."

Interrogated—"Did your brother fear her?"

Answer—"Yes, he feared to let her get out of the country while he was alive. During the last few months of the hopeless war she frequently tried to get away, but he always kept her with him in the camp."

Lieutenant-Colonel and Surgeon Cirillo Solalindo, of Asuncion, who had known Lopez all his life, and who was with him to within fifteen days of the time he was captured by the Brazilian army and speared to death while trying to escape, testified:

"I knew Lopez and Lynch very well. He domineered over his father when he was President. The judges had to receive their instructions from him and decide as he willed whether it was according to law or not. His will was law.

"He used to say to his officers that there was no use to bring a burden into the camp; that they might bring a prisoner or two to give information, but to kill the rest. He was neither a soldier nor a general. I thought him a great coward. He was very cunning. A simple list of persons murdered by his orders would fill a volume.

"Madam Lynch was a married woman and a Parisian prostitute, who lived with him as his mistress. She sent an order to the President's mother to come and dine with her; the old lady refused; I was present when the servant returned

with the answer. She complained to Lopez and he cast his mother into prison. After the President's brother was shot by his order, Madam Lynch carried the dead man's watch.

"She took the valuable jewels of the Church and had them set up for herself. To my knowledge she took between 3,000 and 4,000 ounces of gold from the treasury of the Government and gave it to General MacMahon, the new United States minister, who is here now testifying for her.

"The chickens, tobacco, fruit, etc., sent by friends to the soldiers, she took, selling part, and presenting the balance, in her own name, to the sick in the hospitals. When salt was very scarce and worth its weight in gold, and the soldiers had no bread, only meal without salt, she had 10,000 bags belonging to the Government, and she sold it at exorbitant rates. Many died for want of salt.

"There were hundreds of executions between 1866 and 1870. Lopez ordered three men shot because Madam Lynch reported to him one of his cigars had been stolen and her maid had found a soldier smoking the butt of a cigar. Not certain which of the three men was guilty, as all denied the crime, he shot them all.

"I knew a junior officer who spoke to Madam Lynch on the street one day, asking her to intercede for his superior officer, who was under arrest. She promised to speak to Lopez. The next morning the young officer was arrested and shot for having deigned to speak to Madam Lynch. In a big village in the center of a forest Lopez collected about 12,000 women and children; all but 450 died of starvation."

If the tales above told were not corroborated by some twenty-five witnesses under oath, it would be impossible to believe that at the close of the nineteenth century such things could happen. The only witness produced to testify in favor of this murderous wanton, I regret to say, was an American—General MacMahon, who (mis)represented the United States as minister the last year of the war. He testified that he dined daily with this shameless, cruel, criminal woman and her half-crazed, tyrannical Satanic paramour—Dictator Lopez—and that they were of good moral character and well thought of in Paraguay!

As I stated in a previous chapter, at the close of the war there remained alive 200,000 women and 25,000 old men and boys, out of a population of 700,000 six years before. The country was overrun with Brazilian and Argentinian soldiers, who did as they pleased. Nearly every virtuous woman who could escape, got out of the country, and only the unfortunates were left.

Ten women to one old man or boy! No morals, no laws, no property, no rights! From such a stock and from such a deplorable condition Paraguay started over again.

A VIEW ILLUSTRATING HOW FEW MEN THERE ARE IN PARAGUAY.

I will tell the reader the plain, unvarnished facts about this country. At the time I was in Paraguay there had not been a newspaper man from the United States in this "republic" for twenty years, and only one American within six months.

All telegrams were passed upon by the police and it was just as well to send letters to the postoffice unsealed; they would be read anyhow, and if nothing objectionable was found they would be allowed to go forward; otherwise they would be destroyed and the writer placed under surveillance or ar-

rested, according to the gravity of the contents of the letters.

The whole country was under martial law—or, as they say there, “in a state of siege.” Less than 1,000 people celebrated their centennial—the 100th anniversary of the date when the country was freed from the yoke of Spain—which occurred while I was in Asuncion, and which fact, as indicating the awful conditions of the country, speaks for itself.

I will only add that Madam Lynch admitted getting \$250,000 in gold out of the country during the war, which she held as her own. She died in Paris ten years ago—a poverty-stricken, wretched old woman!

CHAPTER XXVIII.

PARAGUAY TODAY.

THERE are few or no reliable statistics obtainable on Paraguay for the past forty years. The Government is run as a separate private business by the man who can by force and fraud elect himself President or Dictator. The people have nothing to say about governmental affairs, and, so far as I could learn, cared only to keep out of the army and revolutions. The revenues forced from the people are appropriated by each succeeding administration, each one getting away with all the money it can. The President, of course, does well, while he can keep his head on his shoulders and hold his position.

The country has no credit abroad, and the Government cannot secure credit for anything at home; therefore the foreign and local debt is small and never paid. Thirty-five million dollars in paper has been issued, worth practically nothing. This paper money passes locally for eight cents on the dollar, but has no value outside the republic. They have no gold or silver coin. The Bank of the Republic is supposed to have \$700,000 in gold to redeem \$35,000,000 in paper; this would make, if true, the paper money worth two cents on the dollar. The export duty on green hides is one dollar each. There are 300,000 hides supposed to be exported, and the revenue derived added annually to the redemption fund. However, as there are 4,000,000 cattle in the country, it is unreasonable to believe that only 300,000 hides are sent out each year. If the President of the republic did not have to pay the army regularly he could soon get enough ahead to live abroad the balance of his life. The Government admits that there is collected \$10,000,000 gold annually from imports, and as hides and *maté* tea pay export duties, the balance in favor of the President ought to be quite handsome.

The population is estimated at 500,000, but there never was a reliable census taken. There is little doubt that there are three females to one male. There were three Presidents, or Dictators, during the first sixty years of the republic, and twenty-one during the last forty years. They had three Presidents during the nineteen months previous to my visit, and have had two since I left, up to going to press with this book. Only two Presidents in the last forty years served out their full terms.

There is a Congress composed of two houses, the same as in the United States. When the members of Congress do not do what the President wants them to he puts them in jail. One day, while I was in Asuncion, all he could catch of them were jailed. What became of them no one knows. They are supposed to have a constitution, and it must be as good as new, for they never use it. The election of the last two Presidents, previous to my visit, will illustrate the system.

A few years ago, an ignorant but well-drilled Paraguayan soldier, Albino Jara, had risen to be the colonel in command of the army—the highest military position. No President would last a minute without the army, which consists of 2,000 regulars and 3,000—not so regular—and 600 police. The rotation in office is from Minister of War to President, and from Commander of the Army to Minister of War. Of course, four

THE LATE PRESIDENT
JARA, DICTATOR OF
PARAGUAY.

SOLDIERS ON PARADE, ASUNCION, PARAGUAY.

years is a long time to wait to become President, when life is so short. Jara soon said to the Minister of War, "Why don't you do it now?" Meaning run the President off. He, Jara, would then be Minister of War. So they prepared the resignation of the President, they surrounded him with half a dozen revolvers, and asked him if he did not think he ought to resign for the good of his country? He thought the suggestion well grounded. He did not need to call a stenographer to write out his resignation, but signed the one already prepared for him, and "beat it" for a safer country. The Minister of War was duly elected President and Jara became Minister of War. Events then ran along smoothly for a while. Then one day Jara got drunker than usual and concluded to repeat the order of exercises, and on the 18th day of January, 1911, backed by the 2,000 regular army and 600 police, he elected himself not only President of the republic, but also general in command of the army and of the police. That seemed to be rather overdoing it, and not accord-

ing to precedent, and it caused a split in the army. Then the killing began, while all the rest of the male population of Asuncion and Paraguay "lit out" for the woods until the revolution should be over.

The foreign citizens not subject to kidnaping during war or revolution—and there are 30,000 in Paraguay, mostly in Asuncion—just close up their stores and banks and shops in haste, and stay indoors until such time as the shooting and executions are over.

As I said before, there was a split in the army and a nasty revolution that lasted for two months. In the first battle 700 were killed, no prisoners taken on either side, and every wounded man, unable to get away, was clubbed with the butt of the rifle or bayoneted to death. There was no use for hospitals, nor did they have any, or any surgeons, when the war began. After awhile, however, the Salvation Army (you find them all over South America doing splendid work), got permission to establish a hospital. I was told by one of their

nurses that they picked up a boy, supposed to be dead, on the battlefield and brought him back to life. He turned out to be a revolutionist and was taken out of the hospital and shot. He was fourteen years old.

The system of keeping soldiers from deserting during a fight is purely Paraguayan, as I remarked before, and was first put into effect by Lopez II. Each man is under orders to shoot any one seen running away. It is quite effective, as a soldier under this system is in greater danger if he tries to desert than if he stays in battle. Of course, the only soldiers paid are those working for the Government, and the others soon get tired, and when the ammunition they have on hand is used up, they always give up the fight and "light out" for some other country—Argentina, Brazil, or Uruguay. Over 100,000

THE HOTEL DINING-ROOM IN WHAT WAS
ONCE THE PALACE OF LOPEZ,
ASUNCION, PARAGUAY.

Paraguayans are now living out of their country. They do not dare go back. All revolutionists caught are shot, and "a state of siege," which means all laws are suspended, gives the President a good chance to execute all his enemies, on the pretext that they are revolutionists.

Under these conditions, as one may imagine, the people are rather nervous. Some one shot off half a dozen cannon crackers, smuggled into Asuncion, and over one-half the men could not be found for two weeks. Of course, the men do no work and are hardly missed by the women, who do all the work. I will give the reader an illustration of how wrought up and nervous the people are. Although Asuncion has 80,000 people (it had 100,000 five years ago), the city has no sewers or city water, but depends upon wells. Hence I always drank Apollinaris water. Upon one occasion a waiter opened a bottle for me that was so highly charged with gas it went off like a gun, and half the people in the dining-room jumped up, and some of them ran out. Naturally I was a good deal amused.

When martial law is not in force—which is seldom—the judges must do as they are ordered by the President, or lose their positions, and usually their heads at the same time. While

I was in Asuncion the editor and publisher of the oldest paper objected to President Jara changing the date of the centennial anniversary of the republic, and his paper was not allowed to be printed. He was taken out of the city by some soldiers, without any kind of trial—court martial or otherwise. He finally grew exhausted from walking, and told them if they were going to shoot—to shoot him then and there. The soldiers came back without him. That is all we could learn.

I had a long talk with President Jara at the Government's palace. He wore his uniform, and is a well-put-up soldier. He knows nothing about governmental affairs, and can hardly read or write. He told me he was very anxious to establish relations with foreign countries. They now have members of legation from but three countries, the United States being one of these. President Jara also said they desired foreign immigration. I told him he was not likely to get many people to come to Paraguay. He asked me why. I told him life in his country was too uncertain. He assured me that he would now give the people good government, and that there would be no more revolutions. I told him that the health of the people must be looked after, that the mortality among children was too great, four having died in one block, the day before, of diphtheria, because there was no diphtheritic serum in Asuncion. He wanted to know "what that was." And this was the President of the so-called republic, with 500,000 helpless people at his mercy!

Deaths among children equal forty per cent, largely from blood diseases, inherited from their parents. There are few marriages, the average of the estimate I made of illegitimacy among Paraguayans (not foreigners) being ninety per cent. I was in one village where the population consisted of six men, thirty-seven women and forty-four children. They have a few hospital buildings, but these are closed. They have well equipped laboratories for medical and scientific purposes without any one in charge. There are few schools, and the university is used as military barracks. The university building was formerly the residence of Madam Lynch.

There is not much drunkenness, because the people are too poor to buy cane rum. There are few holidays, there being

only six national holidays. Little attention is paid to Church holidays or the Church. The nominal State Church is the Roman Catholic. It is promised State financial aid, but is unable to collect the same.

I found one old American, still a citizen of the United States, and drawing a pension from Uncle Sam as a Mexican War veteran, who was living with about twenty women and

A RURAL HOME IN PARAGUAY. THERE ARE THREE WOMEN TO ONE MAN EVERYWHERE IN THIS COUNTRY.

had a large family of children and grandchildren. They were all seemingly happy. He had been in the country forty years, had prospered, but never did a day's work. The women do practically all the work. There are ten Americans in Paraguay, so far as our consul could learn, but only one had registered and signified his intention of returning to the United States. The people here have a blind faith in the

United States, and believe that if we would only intercede, all their troubles (which are purely internal) would end. Minister Morgan (now transferred to Brazil) was credited to both Uruguay and Paraguay. He made his headquarters in Montevideo, Uruguay. He happened to visit Paraguay officially once during a revolution, and both sides told so many stories about how he had come to take their part, that each side to the quarrel got frightened and ceased fighting.

The interests of Uncle Sam—and they are not many—when I was there were being looked after by United States Consul Cornelius Ferris from Fort Collins, Colorado. He had his wife and daughter with him. They were living a very isolated life. Only ten Governments out of forty-eight in the world have any representation of any kind here. Three of these ten representatives brought their families; two of them have since sent their families home, and the seven single men, or grass-widowers, live as the natives do.

United States Consul Ferris is one of the best men I have ever met in the service. He secured for me a permit to leave the country. I never had to secure such a document before, except in Russia, during the war with Japan. In Paraguay there is no such thing as liberty of speech or press. However,

there is not much crime. The people are simply lazy, and life is so easy and their wants so few it would be rather too much trouble to murder or steal. There is no jealousy or competition, even in love affairs. Even the funerals are simple. When a child dies, for instance, the mother puts the coffin on her head and trudges along to the cemetery, sitting down frequently to rest, smoke and talk. They seem not to mind death. Life for them is short and a thing not particularly prized.

It seems a sin and a crime that this beautiful country, with rich soil, normal and sure rainfall, midway between the Atlantic and the Pacific, with an elevation of 2,500 feet above sea level, producing nearly every variety of food products raised in South or North America, should be brought to such a wretched state. It is so easy to gain a living from the soil, and so little work is necessary, that the people do practically nothing. Very fine oranges grow everywhere and are sold four for one cent, while bananas are plentiful and of very fine flavor, and are but twenty-five cents a bunch. Good tobacco grows wild and uncultivated. Ten cigars can be bought for one cent. Indian corn grows wherever it is planted. Corn is the chief grain diet of the people. There is fresh green grass, sweet the year around, and cattle, particularly free from foot and mouth disease, roam everywhere. Yet the people will not make butter. Too much work. The reason cattle and sheep do so well is on account of the rolling, well-drained country and elevation, which gives cool nights, and the absence of swamps. Three crops of every kind of vegetable are grown every year, if wanted or needed. Some wheat is grown, also oats, but grain crops are too much trouble.

I told my servant to go to the wonderful market in Asuncion and make a list of 100 different things to eat offered for sale. He did so, and said he could have made a much longer list. The four chief sources of income are from the exportation of yerba (or *maté*) tea, *quebracho* wood, oranges, and especially the products of cattle—sun-dried meat, meat extracts and hides.

Yerba, or *maté*, or, as it is frequently called, Paraguay tea, takes the place of tea or coffee with the natives of Paraguay, Argentina and Uruguay, and is extensively sold all over South America and to some extent in Europe. The largest company

in Paraguay is capitalized for \$3,500,000 gold and owns 5,585,000 acres of forest where the yerba tree or bush grows. The tree is from six to twelve feet high, and the green leaves, with the small branches, are pulled off every fourth year. They are then raked up and put into bunches, and look much as if one had been raking up the yard in the fall. They are then dried by placing them in a building, with a fire made from a particular kind of wood outside the building, the heat being conducted under the floor and coming up through the opening over which the leaves are scattered. Great care must be taken in drying the leaves, or the tea may be spoiled. The leaves are then easily separated from the small branches and are taken to a mill, where they are ground into a flour and put up in two-pound packages. The Paraguay Industrial Society puts up 12,000,000 pounds a year, and it sells at the factory at wholesale for twenty-five cents for two pounds. The tea is made by putting some of the powder-like flour into a cup and pouring very hot water over it, then it is sucked through a tube called a *bombilla*, about eight inches long, with a strainer at one end to prevent the small particles reaching the mouth. It is rather bitter, but I liked it. It is not used with sugar. One English doctor told me he had used it himself for forty years, and considered it very much less injurious to head or heart than tea or coffee, while it gave great strength and endurance to the nerves. The industry gives employment to thousands of natives. It is nearly all "piece work."

There is no census on the cattle industry, but the average of six estimates I took showed that there were 4,000,000 head in all Paraguay, and I consider this moderate. Of course, the distance from markets for the products and the crude way of doing things, as well as the lack of breeding the cattle up, does not place the business where it ought to be, yet the average value for three-year-old cattle is \$15 per head. The total annual value is about \$15,000,000, and of course, is the chief source of wealth. Beef extract and dried or "jerked" beef are made, no fresh meat being exported, owing to lack of ice. There are no cold storage plants in the country and no refrigerator cars or ships. Hides are exported green.

Lumber or timber is a big industry. There are many fine

hard woods, but they are so heavy, and transportation from the interior is so limited and expensive, not much is taken out. However, two companies from the United States are taking out the *quebracho* timber, used in tanning leather. In some cases they ship the logs, in others they reduce the wood to sawdust, and in still other places they make the tannery extract, or liquor, on the ground. The last method seems the most reasonable. I understand the Americans are doing well, and no doubt will do so as long as they can keep in with the Government or change as fast as the administrations do.

Fine, sweet oranges grow everywhere, as I have stated, and every boat going down the river is loaded with them. The new all-rail connection, from Asuncion through Paraguay and the Entre Rios country to Buenos Aires, will deliver oranges and all tropical fruits to the seacoast ports in two days. This puts Paraguay in connection with the outside world. Transportation by boats is the worst I ever used, the food is horrid, the beds dirty and vermin-infested. Any person going to Paraguay should go by train.

Land is cheap in Paraguay, especially in the Chaco country, which was supposed until recently to be only swampy.



RAILWAY STATION AT ASUNCION, PARAGUAY.

BAGS OF ORANGES READY FOR SHIPMENT IN PARAGUAY.

The Chaco was formerly occupied by a very bad lot of Indians, who killed off the settlers. This condition is much better now, and I found a number of prosperous settlements in the Chaco and very fine grazing lands for cattle.

Paraguay is not today a "white man's" country, and will not become so until Argentina and Brazil take the country, divide it up and give it a good Government. After the war with Brazil and Argentina, Paraguay acknowledged a debt of \$300,000,000 to Brazil and \$200,000,000 to Argentina. There has never been a cent of principal or interest paid. Brazil says to Argentina, "You take Paraguay and pay to us the debt she owes us." Argentina says to Brazil, "You take Paraguay and pay us what is due us." And there it stands. It is the case of a man owing so much he cannot fail. The people of Paraguay cannot govern themselves. They have lost the basis or unit on which a Government is built—that of the family. The

sooner the country is taken over and properly governed the better for the poor people who live there in sin and ignorance, and the better for the reputation of every other republic in South America, for the people of other nations read about the never-ending troubles and chaotic conditions of Paraguay, and apply the impression gained to all South America, which is not deserved.

Good-by, Paraguay! You are a plague spot, you are hopeless, and you ought to be quarantined. The sooner your name disappears from the map the better for the remainder of the world!

BRAZIL

Area, 3,218,991 square miles, a little larger than the entire United States, without Alaska—Its Atlantic seacoast line is nearly 4,000 miles in length, its extreme width from east to west being nearly 3,500 miles—Population, about 22,000,000, between one-third and one-half white—Its natural resources are almost incalculable in extent, consisting of all field grains, coffee, rubber, sugar, tobacco, cotton, live stock, yerba maté, cacao, nuts, fruits, fine woods, and diamond, gold and iron mines—Exports (1910), \$310,006,438; imports, \$235,574,837—Exports to United States (1911), \$100,867,184; imports from United States, \$27,240,146—Army, peace footing, 28,000, war footing, 100,000, estimated; navy, 38 ships, with 8,800 officers and men—Capital, Rio de Janeiro, population, 1,000,000.

CHAPTER XXIX.

BRAZIL'S COFFEE INDUSTRY.

IT WAS a pleasant noonday when I left Montevideo, Uruguay, for Santos, Brazil, and I was reminded of the evening when, on my way to South Africa, I sailed from the Bay of Naples, Italy, for Mombasa, Africa, via the Suez Canal; for Montevideo is a haven for the Italian immigrant, who, with his picturesque raiment, is everywhere present in that city, finding there the balmy air of his native land and general conditions that exactly suit him.

The distance from Montevideo to Santos is about 1,000 miles, and though there are a number of ports between these two places, I decided to go to Santos, and then work inland, south, north, and east, because the other ports are small, inaccessible to large ships, and in some instances not connected with the interior by railways.

Looking at the map of South America one would naturally suppose that the coast from Montevideo to Santos is a smooth, unbroken line that comes down to the water in a gradual decline—but it is really just the opposite, being much like the

coast of Labrador at the entrance to the Gulf of St. Lawrence, or the banks along the Straits of Magellan.

The rocky headlands of the mountains, sometimes bare and sometimes clad with verdure, come right down to the water line, and in many places project far out into the sea. Submerged in some places, the highlands crop up in others, forming little islands that make this rugged coast dangerous to navigation and necessitating many lighthouses along the shore.

For nearly three days we were practically lost to the world, for owing to the fact that two wireless telegraph companies were desirous of operating in Brazil, and the Government had not yet decided from which it could get the more money, neither was doing much business, so our ship could not connect with land.

But the cable service was evidently working nicely, for on our arrival at Santos we found the American consul, Mr. J. White, and his assistant, Mr. J. W. Reves, awaiting us on the docks, Mr. Morgan, the American minister to Uruguay and

Paraguay, who has since been promoted to the position of ambassador to Brazil, having cabled that we were *en route*.

This example of courtesy on the part of our representatives abroad is only a sample of the consideration Uncle Sam's excellent diplomatic corps in South America gives to the traveler from the United States in this land, and it goes far to make a tour of the country pleasant, and incidentally gives our nation prestige in the eyes of our South American cousins.

My introduction to Santos in particular and Brazil in general was further facilitated by a letter given me in Buenos Aires by Señor Domicio da Gama, then minister from Brazil to Argentina, and now ambassador from Brazil to the United States. In brief, he requested the representatives of the Brazilian Government to accord me the same consideration that is shown foreign guests of the nation, which, in addition to many other courtesies, admitted our baggage without inspection.

This last-named courtesy may seem of small importance to the reader, but to the traveler in Brazil it is of some conse-

quence. Once a foreigner has passed a port of entry in the United States he may go from State to State without molestation by custom officials, but the twenty States of Brazil have, or are permitted to use, an authority greater than we are accustomed to, and "States' rights" in Brazil is no theory, but an actual fact, even extending to questioning the foreigner as he passes from one State to another.

It is odd how the ideas one gains of a country during school days will cling to him until, in after years, he visits that country and has them rudely jolted by the advances that have been made since he was struggling with geographical boundaries and descriptions under the schoolmaster's eyes.

This greatest republic of the South American continent, which is as large as all Europe, and larger than the United States, has always been an object of interest to me—not alone from the stories I had read as a boy of the wonderful parrots, its birds of paradise, big snakes, its great rivers, its savage Indians, and other wonders; but because it is the only political division of the Western Hemisphere that ever had a monarch of its own, and, settled a century before colonization was attempted in the United States, was over a century behind us in establishing a republic, and copied our Constitution almost verbatim when it shook off its royal family. Like the United States, it imported the blacks of Africa as slaves, and like the United States, it freed them by a stroke of the pen, without compensation to their owners, the advisability of which act is questioned to this day, even the blacks themselves agreeing it would have been better for them, as well as their former owners, had abolition been effected gradually and with compensation.

Santos, the port of entry to the State of São Paulo, was founded by Braz Cubas in 1543. It now has a population of about 100,000, and is one of the busiest places in South America. The harbor is one of the most important and best of the entire continent, being from twenty-eight to thirty feet deep, and its docks are three miles long. These are owned by a private corporation, and afford every facility for loading and unloading vessels. Solid trains of cars are run upon the docks and electric cranes transfer freight from cars to ships.

LOADING COFFEE FOR THE UNITED STATES MARKET,
SANTOS, BRAZIL.

The commonest sight in Santos is coffee. No matter which way you turn or where you go coffee looms up in some form or other. If you walk down a street you see drays going by laden with sacks of the berry; if you go near the railroads you see train loads of it; if you go to the docks you see ships being laden with it; if you go into a *café* it is served to you instead of the drinks usually found in such places. You smell coffee everywhere.

Perspiring teamsters and laborers, who in our United States would hunt for the "biggest and coolest beer in town" slip into some *café* with a sanded floor for a "swig" of coffee. Ladies and gentlemen out for a promenade stop in some *café* and sip coffee instead of ice cream soda. The cocktail and the highball are practically unknown, and conviviality finds good fellowship in the coffee cup.

If all this excites the reader to wonder, it is explained when he learns that practically all of the coffee of the Western world comes from Brazil, and most of that supply comes from the

State of São Paulo. So, you see, a very large percentage of the coffee for the entire world goes through the city of Santos on its way to the tables of millions of people in far-away lands.

Coffee is said to be native to Abyssinia, and its name is derived from the Arabic *qahwe*, pronounced "kahveh" by the Turks. It has been known to history since the third century, but up to the fifteenth century it was eaten in the form of paste, the dilution to a liquid form spreading gradually until it became the common practice.

A STREET IN SANTOS, BRAZIL.

There are two stories concerning its introduction into South America, one saying a deserter brought some seeds from Cayenne to Pará in 1761, the other that a Belgian monk introduced some plants at Rio de Janeiro in 1774. Perhaps both stories are true, but up to the end of the eighteenth century coffee was only considered as a medicine to stimulate the nerves, and was to be found only in drug stores. About 1835 the people of South America discovered that coffee was used as a beverage

A COFFEE TREE IN BLOSSOM, BRAZIL.

in other countries and extensive cultivation of this valuable berry was begun.

Coffee thrives in a hot, moist climate, and on rich, well-drained soil, and the State of São Paulo, possessing the proper qualities, has become the coffee garden of the world. The two things most injurious to a coffee tree's growth are cold or hot dry winds.

While there are about eighty species of the coffee-berry tree, only three are raised in Brazil, and of these the common coffee tree greatly predominates because of its general excellence. The plant is propagated from seed, which is usually planted in a nursery, and when the plants are about fifteen inches high they are transplanted, being placed in the ground from ten to fifteen feet apart and protected from the tropical sun. As a rule, the shrub first flowers in its third year, and bears a small quantity, but not until its fifth year does it bear any considerable amount of berries. At twenty years the tree is in its prime, although I saw trees seventy-five years old still bearing. The flower is quite pretty, but its life is seldom over twenty-four

hours, and as soon as it withers and drops the green berry begins to form, and it usually ripens in about seven months, when it strongly resembles a ripe cherry.

The Arabs allow the berries to remain on the tree until they ripen and fall, but I observed that on all the plantations, or *fazendas*, I visited in Brazil, the picking was done by hand. A large sheet was placed under each tree, and then men mounted ladders, or standing on the ground, carefully pulled all the berries from the trees, allowing them to fall upon the sheets. From these they are gathered up and deftly sifted by women

PICKING COFFEE ON A PLANTATION, BRAZIL.

and girls, to remove stems, leaves, etc., after which they are placed in baskets and hauled elsewhere for further treatment.

The berries, as gathered, each contain normally two seeds or coffee beans. Each bean is enveloped by a thin, delicate silver skin, and outside this by a parchment, and both are inclosed in the fleshy pulp of the outer portion of the fruit. All of these coverings have to be removed to prepare the beans for consumption.

The berries when brought from the field are placed in large

tanks and washed there in running water, after which they are run through a "pulper" and then into a tank where the pulps float off, leaving the seeds. These latter are then put through a process of fermentation to remove the parchment, after which they are put into vats and washed, and then they are spread out upon a stone or concrete floor to dry. The bean is still enveloped in its silver skin, which is removed by winnowing and rubbing, and then it is ready to be run through the sorter, which grades the beans according to size. The product is then ready for weighing and sacking, needing only to be roasted and ground to be ready for the pot.

The principal coffee-growing districts of Brazil are all included in the four States of São Paulo, Rio de Janeiro, Minas Geraes and Espirito Santo, but as stated before, São Paulo is the seat of the real industry. In a five-year annual average the world's crop was 15,845,000 bags; of this São Paulo produced 9,260,000 bags, while Rio de Janeiro and the other States produced 3,550,000.

São Paulo alone has in the neighborhood of 700,000,000 coffee trees planted. However, this number will not be materially increased for some years, owing to Government regulation,

A TWELVE-OX TEAM, SANTA GERTRUDIS, STATE OF SAO PAULO,
BRAZIL.

which restricts the destruction of virgin forests and the indiscriminate and almost reckless spread of the coffee plantations. It is held that it is time for the owners of plantations to give more attention to the areas already under cultivation, for by doing so they may increase the production and secure a better quality of berry.

Much has been said and written regarding the great Coffee Trust, but personal investigation led me to the conclusion that a trust, as we in the United States understand the term, does not exist. There are years when the coffee crop is short, just as there are years when wheat does not yield up to the average, and it is to guard against these shortages that the Government of Brazil has taken a hand in the raising and marketing of this important article of commerce.

This control by the Government insures a more stable price, for when there is a shortage the reserve stock is thrown upon the market and the price held down. The high prices prevailing at the present writing are due to a shortage in crop, a condition that would not have existed had the Brazilian Government acted some years ago. This is shown by plain figures. The value of the coffee crop, at a low price in 1909, was \$134,674,470; the value of the crop for 1910 (the fiscal period ending June, 1911), was \$94,670,346 at a greatly increased

YOUNG COFFEE TREES ON A PLANTATION IN THE STATE OF SAO PAULO, BRAZIL.

price. Supply and demand fix prices on coffee as well as wheat, and any one can see that there must have been a shortage, when a high price per bag produces a smaller total return than a low price.

Since the abolition of slavery in Brazil there has been a great influx of immigrants from Italy, and they are gradually supplanting other workers in the coffee business. Three or four workers can easily look after 10,000 coffee trees during the period of formation, and in addition pluck yearly 1,200 bushels of coffee.

When in a condition to be exported, the coffee is burdened by a number of expenses—transportation to Santos, broker's commissions, municipal taxes, State taxes, export duty, loading on ships, and a number of minor expenses that materially reduce the profits of the planter.

However, inventive genius has brought out machinery that will greatly reduce the cost of caring for the trees and plucking the fruit, and when this is fully perfected it is asserted that one man, with four mules and two machines, can look after 40,000 trees per year.

Coffee is the one great industry of southern Brazil; all other industries cluster around it as steel filings cling to a magnet. Raising coffee under the old system was such an easy way to wealth that only such other things as were necessary were attempted.

With some of the best grazing lands in the world, they have neglected cattle raising and bought Argentinian stock; with soil that would raise almost anything, husbandry is little practiced, and the great bulk of foodstuffs is bought from their neighbors. But now that the Government has put a stop to the reckless spread of coffee plantations, and is insisting upon more scientific cultivation, it is quite likely that the planters will discover that the abandoned coffee lands may be profitably put under cultivation and money made on other crops, and that in years to come this section, which now hails Coffee as King, will reap much wealth from the land in other products.

CHAPTER XXX.

BEAUTIFUL RIO DE JANEIRO.

AN AMATEUR artist was painting a sunset, so the story goes, and was laying colors on the canvas in lurid streaks, while near by an old farmer sat watching.

"Ah," said the artist, looking up, "perhaps to you, also, Nature has opened her illuminated pages? Have you, too, seen the lambent flame of dawn leaping athwart the gleaming east; the red-stained, sulphurous islets of gold floating in a lake of fire in the west; the ragged clouds at midnight, black as a raven's wing, blotting out the shuddering moon?"

"No," drawled the old farmer, "not since I quit drinkin'."

Whenever I am tempted to write very poetically I am afraid of "overdoing it," as this artist evidently did. However, there

are some subjects and scenes for which there seems no fitting description except language that sounds extravagant. One of these is beautiful Rio de Janeiro and its matchless harbor.

In the course of my travels over this wonderful earth of ours I have looked upon some beautiful scenery, among which may be named the famous Bay of Naples, the historic Golden Horn of Constantinople, the splendid Bay of Capetown, and our own charming Golden Gate at San Francisco; but in point of actual grandeur and picturesqueness all these works of Nature are surpassed by the magnificent Bay of Rio de Janeiro.

Here Nature, the master sculptor and painter, fashioned the rugged coast of Brazil into a place of marvelous beauty, bringing the granite cliffs of the mountains down to the sea in serrated ridges and peaks, and forming a land-locked harbor the like of which cannot be found elsewhere on the entire globe.

The Bay of Rio de Janeiro has been the subject of poetic praise and description since it was discovered in January, 1501, by Amerigo Vespucci, and the traveler who comes to it, even after a voyage around the world, is as moved by its charms as if he had not been satiated with other beautiful views.

The Bay is the very gate to a tropical paradise; one doubts if there is elsewhere so bold a coast, such a picturesque cluster of mountains, such a maze of small islands, such a burst of tropical vegetation. Guarding the narrow entrance to this wonder-spot of Nature stands an insurmountable granite peak, 2,200 feet in height, known as the "Sugar Loaf," which rises almost precipitately out of the sea. A pretty Brazilian legend

A BIRD'S-EYE VIEW OF THE BAY
TRAVELERS PRONOUNCE THIS THE MOST

says of this towering peak that, having made the Bay of Rio de Janeiro, the Creator was so pleased with His work that He erected this monument as a sort of exclamation point to call man's attention to His masterpiece.

Vespucci in 1501 thought he had discovered a great river, and as he reached this point on the first day of January, he named it Rio de Janeiro (meaning, River of January); but no

stream of any importance flows into the Bay—it is simply a gigantic land-locked harbor, the shores of which form a reverse letter S and are nearly one hundred miles in length.

The entrance to the Bay is only two thousand feet wide, and is defended by forts, one at the base of the "Sugar Loaf" and the other on the point opposite. Thus the city of Rio de Janeiro, the capital of Brazil, is completely protected from

OF RIO DE JANEIRO, BRAZIL.
BEAUTIFUL HARBOR IN THE WORLD.

a foreign foe by water. It would be impossible for war vessels to pass between these forts under the galling fire that could be poured into them.

Passing the narrows and following the channel, we come to that portion of the Bay which is locally known as Guanabara Bay, where the warships of Brazil lie at anchor, and to the west of which is seen Rio, not in a lump, but in pieces, behind the

curves of the seashore and green hills. In front, on the east we see Jurjuba, where the hospital for epidemic diseases is located; after this the charming beach of Icarahy with its celebrated rocks, and farther ahead the city of Nictheroy, the pretty capital of the State of Rio.

The entire harbor is dotted with islands, most of which are large enough for buildings of some sort, some even being large enough for cultivation of the ground. The passenger steamers anchor a little nearer the city quay, between where the men-of-war lie and a small island in front of the custom house, an island on which a beautiful building has been erected as the barracks of the custom house inspectors.

Beyond this the space is taken up by ships of all nationalities, from the largest steamers to the smallest sailing vessels, some just coming, some surrounded by lighters, and others hoisting anchor to leave. At the quay small steamers and sailing ships receive from the storage houses freight for foreign countries. The forest of masts, funnels, stretched ropes, the noise of voices, hoisting machinery and steamship whistles give to that part of the Bay a characteristic feature—a contrast to the vastness and profound silence of the waters elsewhere, for farther away this matchless harbor is deep and peaceful and dotted with islands where life is quieter.

The panoramic view on pages 458 and 459 is of that portion

A BIT OF WATER-FRONT WITH THE CUSTOM HOUSE IN THE
BACKGROUND, RIO DE JANEIRO.

of the Bay lying directly in front of the city of Rio, and is locally known as the Botafogo. It is quite a pretentious bay itself, and as shown in the picture, is completely surrounded by a beautiful drive known as the Avenida Beira-Mar, which, beginning at the Lapa terminal of the Avenida Central, swings around the shores of the Bay in a graceful horseshoe curve to the suburbs—a distance of six miles.

Vessels of commerce do not invade this portion of the Bay at any time, and war vessels only on na-

TOP OF TIYUCA MOUNTAIN, NEAR RIO DE JANEIRO.

tional *fête* days, when the populace crowds the Avenida Beira-Mar. It is the scene, however, of many regattas and water carnivals.

The panoramic photograph from which the picture mentioned was made is declared the finest view ever taken of this beautiful place. We were several days in securing it and took perhaps twenty-five pictures before this one was obtained. An official of the Brazilian Government was so impressed with it that he offered me a large sum for the film, to be used exclusively by the Government, but I refused, keeping

it for the readers of this book and the *Saturday Blade*, in whose interest I made my long journey through South America.

The history of the city of Rio de Janeiro, or to give it its full name, São Sebastião do Rio de Janeiro, dates from 1566, when Estacio de Sá effected a landing with a few colonists near the Sugar Loaf Mountain. The next year the settlement was transferred to the site of the present city, which was built according to the old Portuguese ideas of architecture, with narrow streets that curved around the shores of the Bay at the foot of the mountains.

Rome is built on seven hills; Rio de Janeiro is built on many, for, with the growth in population, the city spread back upon the elevations and up the valleys between them. The narrow strip of land along the sea could not accommodate the homes of a million people—the approximate population of the city today.

As will be shown in another chapter, Rio de Janeiro has always been the capital of Brazil, the Prince Regent of Portugal, when he fled from that country, having established his court at this point. When he returned to Portugal his son,

A CHURCH AND GROUP OF TYPICAL DWELLING HOUSES,
RIO DE JANEIRO.

SCENE IN A PARK IN RIO DE JANEIRO.

Dom Pedro I., remained as the Emperor of Brazil. When Dom Pedro II. was overthrown and a republic established, the capital remained in this city, which thrived and grew, despite the fact that it was handicapped by those pests of the tropic—yellow fever, bubonic plague and smallpox.

Not understanding how these dread maladies were spread, when they became epidemic to such an extent that merchant ships would not touch at the port, no real attempts were made to stamp them out. Rio de Janeiro would possibly still be the pest hole it had been for centuries, had it not been for the courage and bravery of United States army doctors, who gave their lives in demonstrating that mosquitoes were the active agents of infection.

The city of Rio de Janeiro was the first to recognize the importance of the discovery and act upon it. In 1902 President Alves appointed a special commission of engineers and medical experts to devise a plan to make Rio de Janeiro not only sani-

. A PALM-LINED BOULEVARD IN RIO DE JANEIRO.

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tary and safe, but beautiful as well. One year was spent in making plans and the negotiations for loans necessary to carry out the work. In 1903, with nearly \$60,000,000 secured for the enterprise, work was begun, but before it was completed nearly \$100,000,000 was spent.

Large hills were torn down and low places filled up, an up-to-date water and sewer system was installed, and the narrow streets running back from the water-front were widened. Five valleys that break the ridge of mountains back of the main part of the city were utilized in a peculiar way to purify the air of the city. The reader's own hand will illustrate this as well as a picture. Assuming that the hand is the Bay in front of the city, the fingers, as they spread apart like a fan, will represent the avenues that, beginning at the Bay, where they are very wide, gradually get narrower as they run back to meet the valleys, a peculiar formation that almost continually draws the sea breeze back through the city into the mountains.

Of course, there were opponents to this great enterprise, but the wise officials simply went ahead with their work, condemning property, as any great city should do, razing old, obsolete structures, and in their places having modern, up-to-date buildings erected, that go far toward making Rio de Janeiro one of the most beautiful places in the world.

Today it is absolutely sanitary; the mosquito is no more and flies are scarcer than in the cities of the United States. The Mosquito Department of the city is as prompt and efficient as the Chicago Fire Department, startling as that statement may seem. If a person discovers a mosquito, a telephone call will bring two inspectors in ten minutes, and it is their business to locate the pool where it was bred and remove the breeding place.

In all my five weeks' stay in Rio de Janeiro I did not see or hear a mosquito, nor was I bothered with flies, and this, despite the fact that the doors and windows were wide open. I learned that there is not a mosquito bar or screen used in the entire city.

One result of the recent rebuilding of the city is magnificent boulevards, which are made by laying cobblestones upon a bed of concrete, and spreading a thick layer of asphalt upon the cobblestones. Having the best of asphalt and no frost to heave

AVENIDA CENTRAL, RIO DE JANEIRO.

the foundation, the boulevards of Rio de Janeiro are, without exception, the finest in the world. They are lined with shade trees, with walks for pedestrians and seats for those who wish to rest and watch the automobiles skim by at a rate of forty to sixty miles an hour. Of these boulevards the most beautiful are the Avenida Central, with which there is nothing in the United States to compare, and the picturesque Avenida Beira-Mar.

Before the reconstruction of the city it was impossible to operate automobiles along the narrow streets. As a result all of the autos are new and of the best European make, on which only seven per cent import duty is charged. American manufacturers cannot meet the price of the European cars, so an automobile from the United States is a rare sight in Brazil. All automobiles carry two men "on the box"—even the taxis; this is a continuation of the old custom of the richer element having a coachman and a footman on their carriages.

It is impossible in a short space to describe the beauty of Rio de Janeiro, which, beginning at the balustrade sea wall of granite, sweeps back over the smaller hills of two hundred and three hundred feet in height, around the peaks that extend upward to over two thousand feet, and up the valleys which are lined with houses set in the very exuberance of tropical magnificence.

Some of the hills and mountains are clad in verdure, others rise steep and bare. One cliff faces the sea at a height of 2,200 feet, and the cleavage is so steep that it has been scaled but once, and that by a trained athlete, who was careful not to come down the way he went up. Asked to tell of the thrilling climb, he said the worst thing about it was that his hands were made sore by stepping on them as he crawled from niche to niche up the towering wall, finding at times that the only place to put his feet was where he was clinging with his fingers. You may believe this if you want to.

The arrangement of the hills and mountains about the city results in a marvelous series of echoes, and when one of the forts or warships fires a salute the resounding echoes make it seem much as if a battle were in progress. A single shot will produce four or five echoes, depending upon the location of the

gun when fired. They tell a story of how an American, from the Rocky Mountain region, once listened to these remarkable echoes without much interest. "As echoes they don't amount to much," he said. "Why, I've got an echo in the mountains near my gold mine that is worth something. Every night when I am ready to go to bed I just go out and yell, 'Seven o'clock! Get up!' and at exactly seven in the morning the echo yells the same words in at my window and I wake up. Saves a lot of trouble, you see."

Nowhere in Rio de Janeiro did I see evidences of poverty.

EMPEROR'S PALACE, NOW NATIONAL MUSEUM, RIO DE JANEIRO.

although the "simple life" was in evidence in the quarters where the laborers toil and live. The genial climate makes an excess of clothing unnecessary, so about all the laborer needs, if he does not care for the conventions of society, is a pair of cotton trousers; while his wife can, and does to a certain extent, manage to get along with a cotton slip built *à la* "Mother Hubbard."

The rebuilding of the city has resulted in the erection of many new and beautiful marble buildings, some of them six

THE MUNICIPAL THEATER, RIO DE JANEIRO.

and seven stories high. Notably among these may be mentioned the Monroe Palace, shown in the front of the volume, which was built in commemoration of the American Monroe Doctrine; the Municipal Theater, with a capacity of 20,000 people, and the Tramway Hotel, which is so constructed that street cars run directly through the lower story.

The old palace of the Emperor Dom Pedro is still one of the objects of interest, being now used as the National Museum, where are kept many of those treasures that are dear to the hearts of Brazilians. One of the objects of interest to be found in the museum is the Brazilian meteorite, which is the largest in the world, weighing nearly five tons. This wanderer from outer space was discovered in 1871, and after many unsuccessful attempts was finally placed in the museum.

All of the shops and stores of Rio de Janeiro are small. In widening the streets the front ends of the stores were sliced off, leaving the merchant sometimes one-half of the space he had formerly occupied. There are no department stores, such as we have in the United States, and while the merchants carry very complete lines, their stocks are small, being replenished frequently from large warehouses where the goods are held in bond, the duty on which is not paid until they remove the articles.

The city has a very fine street car system, the bonds of which are owned by Canadian capitalists. The cars are all open and the seats are so narrow that it is difficult for a fat man to squeeze into one. There are two rates of fare, nine cents being charged the ordinary passenger, but in the early morning and in the evening a second-class rate of two cents is charged for the benefit of the laborers going and coming from work.

The municipality is governed by a Prefect, appointed by the President of the republic. The Minister of Justice is the Superintendent of Police, and the police force is comprised of about 4,500 men. The fire department is one of the most important institutions of the city, and is without doubt, the most efficient in all South America.

A Canadian company, with a capital of \$50,000,000, incorporated in 1904, has developed the abundant water power about

LIBRARY BUILDING, RIO DE JANEIRO.

STORKS AMONG FERNS IN THE BOTANICAL GARDENS, RIO DE JANEIRO.

the city for the purpose of electricity, so that the city is well lighted, and has ample power for all the manufacturing establishments that now exist or may be built.

One of the picturesque sights of the city is a huge granite bridge crossing from one elevation to another. Before the installation of the present up-to-date waterworks system this was used as an aqueduct. The Avenue of Palms on the Canal do Mangue is another of the charming spots of this most attractive city, and the sightseer lingers long entranced by its beauty.

To fully describe the Botanical Gardens, which lie in the

A UNIQUE COFFEE HOUSE, RIO DE JANEIRO.

suburbs of the city, would require well nigh as much space as to describe the city itself. Here Nature and man have conspired together in the making of a garden that is a veritable Eden. It may be reached by street car or by auto, either trip being one of countless surprises and delights. At one point on the way an enterprising man has taken a cave-like formation of granite in the base of a hill and converted it into a delightful coffee house. It was so unique that I present readers with a photograph of it above.

The city is well supplied with schools of all sorts, churches

THE CATHEDRAL, RIO DE JANEIRO.

and charitable institutions. While the population is mainly Portuguese, there is the usual cosmopolitan mixture of all races, among which the negro predominates, as the result of the importation of slaves prior to the middle of the last century.

To write a really adequate description of beautiful Rio de Janeiro would occupy more than one chapter. Even then it is doubtful if one could convey to the reader a word-picture that would do the place justice. In this spot there is a combination of blue sea, of verdant islands, of soaring cliffs and green hills and picturesque architecture, that form a vision of beauty I believe unequaled elsewhere on the globe. All praise to the men of Rio de Janeiro, who had the wisdom and energy to create a city so sanitary, so artistic, and so entirely pleasant for human beings to live in.

There are numerous beautiful suburbs about Rio de Janeiro, among them Petropolis perhaps being the most notable. This little city lies across the Bay and up in the mountains, twenty-eight miles distant from the capital. It is 3,000 feet above sea level, and its situation is exceedingly picturesque and salubrious. There are many handsome buildings, and the place is unique as the residence of the entire foreign diplomatic corps. This came about by reason of the fact that several years ago the diplomatic body abandoned the capital during a yellow fever epidemic. It is likely that the diplomatic corps will eventually be removed to the capital for permanent residence, since Rio de Janeiro is now in excellent sanitary condition. Petropolis is a favorite resort of wealth and fashion, and during eight or nine months of the year teems with life and gayety. For a small town it is important, since it is the residence of twenty foreign diplomats.

I had an interview with Hermes da Fonseca, President of Brazil, which was one of the most interesting and pleasant experiences of my South American journey. I was presented to the President by a personal friend, United States Ambassador Irving B. Dudley, since deceased. President Fonseca's residence is the Government Palace at Rio de Janeiro. I found him a pleasant, courteous gentleman, living in democratic simplicity that was in marked contrast with the pomp and red tape usually surrounding rulers. We discussed many

THE LATE UNITED STATES AMBASSADOR, IRVING B. DUDLEY, HIS
WIFE AND DAUGHTER, ON THE VERANDA OF THE
PALACE ISABEL, PETROPOLIS, BRAZIL.

subjects, of which I will mention only the more important.

Regarding the subject of international arbitration the President declared that Brazil was very much in favor of it, so much so that it had been provided for in their constitution, and in that respect Brazil was ahead of every other nation of the world. The very first trouble Brazil had with another nation, after the establishment of the republic, was with Argentina. In accordance with the constitution, Brazil prevailed upon Argentina to leave the matter to President Cleveland of the United States for arbitration, and as it happened, he decided in favor of Brazil, since which time she has had the highest opinion of arbitration and a warm feeling for the United States.

In our discussion of reciprocity between the United States and Brazil, President Fonseca said that the United States was the only country with which Brazil exchanged goods on that basis, and that on several leading export articles we have the advantage over other countries in the matter of duty, and on all articles imported into Brazil we have from 15 to 30 per cent better rates than any other country.

I called his attention to the fact that 99½ per cent of all goods we import from Brazil come into the United States free of duty, there being no import tax on coffee and rubber, Brazil's greatest export staples, and then asked if his country could not make us better reciprocal terms than we had already. His answer to this pertinent query was a lengthy explanation of governmental affairs and condition of finances, which may be briefly summed up by saying that they could not do so at this time because the nation needs the money thus obtained for governmental purposes, Brazil being larger than the United States in area while possessing only 22,000,000 inhabitants, 50 per cent of whom are Indians and negroes, who pay no taxes.

While on the subject of the commercial relations of our respective countries I mentioned that 40 per cent of Brazil's exports found a market in the United States, while only 12 per cent of Brazil's imports came from the United States, and suggested that Brazil should buy more goods from us. His reply was that we should make a greater effort to sell our goods in Brazil, and I was compelled to admit that we do not

work the field as we should and take advantage of the reciprocal duties. It is a lamentable fact that our exporters do not make as effective efforts to sell goods in Brazil as manufacturers of European countries, and perhaps the principal reason is that we do not possess any banks there and the business done must be transacted through the agency of foreign banks.

I commented on our friendly diplomatic relations with Brazil—the youngest republic in South America, and in fact, the only nation in the Western Hemisphere where we have established an embassy with a representative of the rank of Ambassador—and in his reply President Fonseca spoke in the

highest terms of my friend, the late Ambassador Dudley. He stated that he was proud to have had almost daily conversations with a gentleman of such high standing, character and intellectual attainments.

President Fonseca stated that he felt that the United States was a real friend to Brazil, and that we had always shown this when a friend was needed.

In our discussion of the rebuilding of the city of Rio de Janeiro for the purpose of securing perfect sanitation, I asked if they had not taken great risk, and he replied that the work which

HERMES DA FONSECA, PRESIDENT
OF BRAZIL.

cost approximately \$100,000,000, and made Rio de Janeiro the finest city in the world from a sanitary and artistic standpoint, had been put through in face of the opposition of 85 per cent of the people; and that even when finished and its advantages were evident to all, the feeling of opposition was so strong against the men who had gone ahead and completed

this most gigantic enterprise, that they were obliged to leave their homes and live in foreign countries.

I then told him of our own experience in the improvement of the city of Washington, the capital of the United States. "Boss" Shepherd, who engineered and put the work through, was assailed as a robber and grafter on account of the high cost of the work, and so hot was the fight made upon him that he was forced to leave the United States. He went to Mexico, where he engaged in mining, and years afterward, when the people of the United States realized the injustice done him, he was brought back, given a big banquet, apologized to, and everything possible done to wipe out remembrances of the insult heaped upon him.

I inquired how the population in cities compared with that of the country in Brazil, and was astonished to learn that they had just completed, at enormous expense, the first house-to-house census of the country. The President informed me that 20 per cent of the people of Brazil live in cities. In Argentina 40 per cent live in cities, and in the United States 28 per cent. Brazil's figures seem about right to me, and in my judgment this division of population is bound to be of advantage to the country, keeping the cities prosperous and the country districts more so.

As to railroads, President Fonseca regretted that Brazil was still short on mileage. He is alive to the fact that adequate transportation is necessary for the development of the country, and said the country was doing everything it could to aid in the building of roads, guaranteeing bonds and aiding in other ways every enterprise that would prove of advantage to the country. About 1,500 miles of road were constructed during the year previous to my visit. Brazil has only 12,500 miles of railroad, while the United States has 234,000 miles.

My personal opinion of President Fonseca corresponds with that held by many leading men of Brazil (some of whom do not agree with him in politics), that he is thoroughly honest and while not a trained politician or statesman (having been Commander of the Army prior to his election) that he is a very safe President, listening carefully to all sides of all questions of importance before giving judgment, and that

political parties and factions do not control him. In other words he is the President of Brazil, the same as he was Commander of the Army, impartial to all, and working for the good and glory of his country.

The constitution of Brazil is modeled closely after that of the United States, so closely, in fact, that with minor exceptions, such as greater States' rights and the clause providing for arbitration, one would imagine them identical. The Congress is composed of Senators and Deputies, and the duration of Congress is three years. A majority of each body is necessary to constitute a quorum. To be eligible to election one must have been a citizen four years in case of a Deputy, and six years in case of a Senator. The President is elected every four years, but cannot succeed himself. He must be a native-born Brazilian, and over thirty-five years of age. His duties and powers are similar to those of the President of the United States.

The judicial power of the union is also similar to that of the United States, and the twenty-one States hold much the same relation to the Federal Government as in our own country.

Being constitutionally in favor of arbitration, Brazil's army and navy are small; the people regard it only necessary to keep pace with other South American nations in this respect. Unlike Chile and Argentina, Brazil has no compulsory law to fill either branch of arms, relying on a volunteer service, very

similar to our own. Her navy consists of thirty-eight vessels, some of which are very modern, and 8,800 men; the army on a peace footing consists of 28,000 men.

Brazil's monetary system is based on gold values, and is therefore stable. The unit of circulation is the milreis, with a value of thirty-three cents in our money. The country is well supplied with banks, the principal nations of Europe all being represented by firms in the largest commercial cities. The principal foreign bank is the London-Brazilian, which has branches all over South America, and is one of the soundest institutions in the world. I observed that while the Brazilians are inclined to be a trifle jealous of the success of foreigners in most business ventures, they are anxious for the establishment of foreign banks, and the Government gives them good protection.

On one of the many small islands in the Bay of Rio de Janeiro lies a complete outfit for a large oil-refining plant that has never been erected. It belongs to the Standard Oil Company, and as it lies there a prey to the elements it is mute testimony to the jealousy of the Brazilians in regard to foreigners obtaining a business monopoly, and at the same time shows how a United States money king can curb commerce when he does not have his own sweet will. The story is interesting and few know all its details, as it has never before been in print.

A few years ago, a friend of mine, who is the president of a large New York bank, advised me that the chief financiers interested in his bank had declared that it would greatly aid the commerce of the United States with South American countries if substantial American branch banks were opened in the various business centers of that continent, and that they would establish the first one in Brazil. A year or so later he advised me that they had given up the project, adding that the "old man," as he called the leading capitalist interested in the bank, had backed out. That was all I heard at that time.

While in Rio de Janeiro, I picked up the missing link in the story. Some years ago, a friend of Brazil's Minister of Finance suggested to him to put an import duty on refined oil, admitting crude oil free, and then give a company he would

ISLAND IN THE BAY OF RIO DE JANEIRO WHERE THE OIL TRUST
PLANNED A REFINERY.

form a monopoly on refining oil. This was done by due process of law, and the promoter went ahead with his enterprise, but just when he was about to secure the necessary financial aid a local panic made this impossible, and the project was given up.

The Standard Oil Company, however, never overlooks anything to its advantage, whether in the United States, Brazil, or the remotest part of the world. The concession secured by the Brazilian promoter was valuable to the Trust, and after showing him that it was of practically no value to him, they bought it at a very low price, arranged all the details for a great refining plant on the island in the Bay of Rio de Janeiro, and shipped the machinery and material for the refinery.

Meanwhile the Minister of Finance learned from his friend, the promoter, that the Standard Oil Company had secured the concession at a ridiculously low price, and would at once pro-

ceed to enjoy the monopoly on refined oil, whereupon he proceeded to undo what he had done. He had secured the duty on refined oil, so he simply had it removed, making the concession now owned by the Oil Trust of no value.

As stated before, the oil-refining plant has not been erected, nor has the branch bank above referred to been started. Readers, no doubt, are so well informed relative to the connection between the Oil Trust and the great banks of Wall Street that it is not necessary to go into detail and explain why the money king refused to go ahead with the banking project when he could not have the refined-oil monopoly of Brazil.

Meanwhile the United States is denied the commercial advantages in Brazil that are enjoyed by European countries, simply because we have no branch banks there. The time may come, however, when the grudge of an oil king may not operate to stifle commerce, and then our manufacturers will be able to take advantage of our reciprocal trade agreement with Brazil.

CHAPTER XXXI.

HOW BRAZIL BECAME A REPUBLIC.

THE honor of discovering that portion of South America now known as Brazil is given by historians to Pedro Alvarez Cabral, a Portuguese explorer.

The western coast of Africa is only about 1,200 miles from the eastern coast of South America, and in sailing south Cabral was carried west, and on May 3, 1500, anchored his fleet at a point about 400 miles northeast of the present site of the city of Rio de Janeiro. This date is a national holiday in Brazil, and the anniversary for the annual convening of the Congress of the republic.

Cabral thought he had discovered an island, which he named the "Island of the True Cross," and this name stuck to the country for nearly half a century. He took possession of the land in the name of his King and the Church, and then inquired of the Indians if they knew what gold and silver were, and finding them uninformed, he decided that the discovery made was of little value on account of the absence of these valuable metals.

Several Spanish explorers and discoverers touched the coast of Brazil soon after Cabral's discovery, but their accounts of the country were not flattering, and when Orellana crossed the Andes and sailed down the Amazon in quest of gold, and reported none, and that the country adjoining the great river was inhabited by fierce bands of savages, the Spanish Government concluded to "pass up" this magnificent domain.

Portuguese exploring expeditions were sent out at once under command of Amerigo Vespucci. He was disappointed in finding no gold or silver, but he did find that the country possessed a great quantity of brazil-wood—a dyewood that had been used in Europe for centuries. The commercial importance of this find resulted later in changing the name of the

country to Brazil, much to the grief of the churchmen, who preferred "Island of the True Cross."

A country yielding no gold or silver held but little attraction in that day, so for many years no direct effort was made to settle Brazil. However, attracted by the gain to be made from the abundance of dyewoods, private expeditions were fitted out to gather this valuable article, and in time the coast became well known and reports of its fertility attracted attention.

The area of Brazil is estimated at 3,218,991 square miles, a country larger than the entire United States, not including Alaska. Its Atlantic seacoast line is nearly 4,000 miles in length, its extreme width from east to west being about 3,500 miles. It is traversed by mountain ranges of such height that its climate is more uniform than any other habitable region near the equator.

Occupying the central portion of the continent (see any map of South America) it touches all the political divisions except Chile, and being situated in latitudes where evaporation and precipitation are largest, it has the steadiest and most uniformly distributed rainfall of any part of the globe.

The first permanent settlement was made by mutineers from

a dyewood ship, who were left among the Indians, one of whom, named Caramurú, had a John Smith-Pocahontas experience that ended in Caramurú gaining an Indian bride, thus establishing a sort of bond of union between the white men and the Indians, that resulted in other white men taking Indian wives.

As early as 1516 the Portuguese Government offered to give farming implements to settlers in Brazil, and shortly after this some sugar-cane was planted, but the first serious effort in this industry was made in 1526 when a sugar factory was established at Pernambuco.

In 1531 the Government began to realize that the sugar-raising industry could be made profitable, and Martim Affonso da Souza was sent to Brazil with five vessels and a large number of settlers. Where the great coffee port of Santos is now located he founded the first real Portuguese colony. Six other permanent colonies were established, and until the middle of the sixteenth century they flourished.

During this period there was always more or less trouble in procuring laborers. The Jesuit priests had, by heroic self-sacrifice and arduous labor, brought the coast natives into complete subjection, but they wanted them for themselves and objected to them working for the planters.

This, together with strife with the Paulist fathers, resulted in the Jesuit Indians being driven farther back, and to supplant them the Portuguese, who were the pioneers of the African slave trade, began to import negroes from Africa.

In 1581 Philip II. of Spain became also ruler of Portugal, and all South America came under the domination of one monarch, but Spain's supremacy of the world was hotly contested. In 1623 she had to let go and the Dutch took Brazil; but in 1655, after eleven years of warfare, the Dutch were driven out and Brazil was restored to Portugal.

During this long war many of the negro slaves escaped into the interior and formed settlements, and in the search for these escaped slaves and during their subjugation, considerable exploration of the interior was made. About the year 1670 an expedition that had been out slave-hunting returned to the coast with the news that gold had been found. Intense excite-

ment followed and there was a rush to the *El Dorado*, some three hundred miles inland, that threatened to depopulate the coast towns. It was an important discovery, one State alone having produced 25,000,000 ounces of the precious metal up to the present time.

For years Spain had claimed territory as far north as Santos, while Portugal claimed the country as far south as the Rio de la Plata. As both could not own the 1,000 miles of coast between these points there was always trouble about it. How-

THE PRESIDENT'S PALACE, RIO DE JANEIRO.

ever, in 1777 a treaty was established which gave Uruguay to Spain, and the Portuguese were allowed to keep all the territory north of that point.

Portugal had been an ally of England for a century, but in 1807 Napoleon demanded that she break with England. The Prince Regent, who was governing for his queen mother, at that time insane, tried to evade this, but when Napoleon prepared for war he gathered up all his portable belongings, and,

followed by some 15,000 persons, fled to Brazil, locating the seat of the Portuguese Government at Rio de Janeiro. Brazil had to assume the burdens as well as reap the advantages of being an independent nation. The whole extravagant Portuguese Government, with its swarm of hangers-on, who had bankrupted both Portugal and Brazil, now looked to Brazil alone for plunder and sustenance.

In 1820 an outbreak of revolutionists in Portugal resulted in a call from the mother country for the Prince Regent to return or to send his son to rule, the powers of Europe being agreeable to this move. Before any action could be taken the revolt spread to Brazil, and a constitution was demanded. The Prince, afraid for his life, sniveled in his palace, while his son addressed the mob and agreed in his father's name that the people should have their way.

This act made young Dom Pedro, who was progressive, the real leader in Brazil, and he lost no time in packing his royal father, and the hangers-on of his court, off to Portugal. The seat of Government, however, was still in Portugal, but young Pedro, yielding to the voice of the people, led the revolt that made Brazil independent, and on October 12, 1822, he was solemnly crowned "Constitutional Emperor of Brazil," announcing that he would accept the constitution to be drawn by the approaching constitutional assembly.

Unfortunately his loud protestations of constitutionalism turned out to be windy promises, and there followed twenty years of bloody revolts because the Emperor had no idea what real liberty meant. The first Congress, which met in 1827, voted as the Emperor dictated, and consequently lost prestige with the people, and after four years of bickering and rebellions he abdicated in favor of his infant son.

The regency that followed Pedro's expulsion lacked influence and prestige, and civil war broke out and the turmoil became so great that in 1840, when he was but fifteen, Pedro II. was declared eligible to take his seat as Emperor. Fortunately for his country, he resembled his mother more than his father; he was quiet, studious, shrank from observation and ruled constitutionally until the end.

In 1843 Dom Pedro II., being then not quite eighteen years

of age, was married by proxy to Theresina Christina, daughter of Francis, King of Naples. It was one of those marriages made for reasons of State, so common in royal circles, and the boy did not see his bride until she came to Brazil.

History describes her as an old maid and not particularly good-looking, so it is little wonder that the young Emperor turned his back on her and sought his chamber almost in tears. However, he was a kindly soul, and after the first disappointment was over he realized he had been given a splendid woman as a wife, and he made her a good husband. Their two boys

EMPEROR DOM PEDRO AND FAMILY, THIRTY-FIVE YEARS AGO.

(Dom Pedro II. and his daughter Isabel are standing together; to the left is the Empress; to the rear at the right is Isabel's husband.)

died in infancy, but in 1846 Isabel was born, and under Dom Pedro II. Brazil prospered as never before.

In 1862 Brazil took a hand in settling a small rebellion in Uruguay, which act furnished Lopez II., Dictator of Paraguay, a pretext to start trouble, which culminated in 1865, when Brazil, Argentina and Uruguay allied themselves in a war to exterminate their unpopular and despotic neighbor. This conflict was not ended until 1870, and it cost Brazil \$300,000,000 and 50,000 lives, with no material advantage except that of assuring the free navigation of the Paraguay River.

With the close of the Paraguayan war a series of movements began, which ended, twenty years later, in the overthrow of the empire. The abolition movement, which had begun in 1848, finally assumed alarming proportions, the advocates of a republic having sown discontent, and, while the country continued to prosper, these great questions kept the public in constant turmoil.

In Brazil the blacks did not reproduce as rapidly as the whites, and when importing them ceased, their number decreased until in 1873 there were only about 1,600,000, as compared with 2,500,000 in 1856. Slaves furnished nearly all the labor, and it was believed that emancipation would result in agricultural collapse.

The Emperor, however, was too much of a Christian not to realize the moral side of the question, so there was no opposition from the throne when a law passed the Congress declaring all children born thereafter free, though bound until they were twenty-one years of age. Under the influence of this measure the number of slaves decreased to 743,000 in 1887, when a final attack was made upon the institution of slavery.

The poor old Emperor had gone abroad, sick and failing, leaving his daughter Isabel as regent, and, in 1888, she announced from the throne that the imperial program was absolute, immediate, noncompensated emancipation. The law was passed with scarcely a murmur and the Princess signed the document, though she was warned that her act meant the end of the empire.

With slavery abolished the next step was to establish a republic, and the propagandists of this movement became more

active than ever. The Emperor's health had grown more feeble, and the Princess Isabel, who was unpopular, was in power. Her parsimonious French husband, the Comte d'Eu, was bitterly disliked, and while there was but small desire to dethrone the Emperor, the prospect of Isabel and her husband as the rulers inflamed the spirit of revolt.

On November 14, 1889, the republicans, after a show of military force, quietly deposed the Emperor, and Brazil became a republic the following day. On November 16th the stricken Emperor and his family were placed on board a ship bound for Lisbon, Portugal.

The provisional Government continued in power fourteen months, and during that time organized the provinces into States after the pattern of the United States of North America. Church and State were separated, universal suffrage established, civil marriage was introduced, and every vestige of monarchical custom was obliterated.

The constitution was adopted in February, 1891, and Deodoro da Fonseca was elected President. Thus Brazil, possibly the richest country in the world, within four hundred years had the Indians, Portuguese, Spanish, Dutch, French, and a monarch of her own, as rulers, and is now a splendid republic. Here, as in almost every quarter of the world, the progressive evolution of human government has been sure and satisfactory.

CHAPTER XXXII.

A BRAZILIAN-AMERICAN COLONY.

THE *milreis* is the unit of value in Brazil, and is worth thirty-three cents in United States money. It might be well to amplify this by saying that the nominal value of the *milreis* is fifty-five cents, but thirty-three cents is the real value, because Brazil has only about \$100,000,000 in gold coin, while it has upward of \$400,000,000 in paper money and about \$25,000,000 in silver in circulation.

The United States does not cut much of a figure in a financial way in Brazil; as England is pre-eminent in Argentina, so we find France pre-eminent in Brazil. The French financiers are securing most of the "plums" that go to outsiders, while French manufacturers have a large percentage of the country's trade.

The United States Government is making moves to the same end in Central America, and to some extent in Argentina. The recently made loan to Honduras and the building of battle-ships for Argentina by ship-building firms of our country tend to strengthen trade relations with our Southern cousins, so we are gradually taking advantage of opportunities long neglected.

The Brazilian Government is now building a large ship yard on the southern coast, the concession having been let to a private corporation, the Government guaranteeing six per cent on the investment. It is the purpose of the Brazilian Government to build its own warships.

In speaking to the Admiral of the Brazilian navy about the mutiny, which no doubt readers will recall as occurring some time ago, and for which seventy mutineers were executed, I inquired if the conditions were not bad in the navy.

He smilingly replied that they were no worse than in other navies, and reminded me that we had had a revolt in our own navy, and that the son of a former Secretary of the Interior,

a minor naval officer, was executed with two others for inciting the revolt. (I have investigated this story since my return to the United States, and have found it true.) Which goes to show that we Americans have no license to get "puffed up" and criticise others too liberally; we have many defects, and if one goes abroad and gets "chesty" one is very likely to have these weak spots pointed out. However, when other nations fail to admire certain qualities of ours the motive may not always spring from self-satisfaction, as with a North Carolina colored gentleman some one has told about. This man was honest and industrious, but, in the opinion of the new minister, unsociable.

"Neighborliness, my dear friend," said the preacher, "is brotherliness. Do you take the trouble to see much of your neighbors?"

"Ah reckon ah sees as much of them as dey sees of me," Rastus replied.

"Perhaps," said the clergyman, "but do you love your neighbor as yourself?"

"Ah reckon ah does, pahson," Rastus replied, "but you know, suh, I ain't p'tic'larly stuck on mahself neither."

The reader can make his own application.

In religion Brazil, like all other South American countries, is decidedly Catholic. However, since the fall of the empire and establishment of the republic, Church and State are entirely separate, the relation formerly existing having been eliminated entirely by the constitution, which, as stated in another chapter, is modeled after that of the United States. Brazil is now a great field for the missionaries of all churches, which thought leads me to the State of São Paulo, and my personal experience in visiting Villa Americana, as it was there I met more missionaries than at any other place in all Brazil. Villa Americana, or to put it plainly, American Village, has a remarkable history, which I will briefly relate.

In 1866 there sailed from the port of New Orleans two ships carrying 365 men, women and children—about eighty families—who had left their homes in Georgia and Alabama to escape the unpleasant experiences of the reconstruction period that followed the Civil War.

One of the ships, carrying about one hundred of the party, was bound for a point in Mexico, the other for Brazil. Their object was to go to some country where slavery was legal, where the climate was somewhat similar to their own beloved South, and where they could raise cotton, cane, rice, tobacco and watermelons under the conditions to which they were accustomed.

It so happened, however, that the Mexican insurrection was

A BIRD'S-EYE VIEW OF

at its hottest at this time, Maximilian, the Mexican Emperor, having just been executed, so the ship that had sailed for Mexico changed its course and started after the one on its way to Brazil. Off the coast of Cuba the former was wrecked, and the passengers were transferred to the other ship.

The ex-Americans landed at Rio de Janeiro, Brazil, on

April 22, 1867, and after some negotiation secured free a large tract of land from the Government. On this land they started a town known as Xirica. In a short time, however, they found this locality too low and damp, so they moved to a point one hundred miles north of the city of São Paulo, where they purchased a large tract of land for five dollars an acre, and founded the town known as Villa Americana. This land is now worth twenty-five dollars an acre.

VILLA AMERICANA, BRAZIL.

The elevation here is about 3,000 feet above sea level, and, though it is only twenty-five degrees south of the equator, the climate is ideal. There is no frost, nor is there any excessively warm weather, and one may sleep under a blanket all the summer months.

Although the soil is adapted to the growth of coffee, the

Americans did not attempt to cultivate this important article of commerce, as they knew nothing about it. They confined their efforts to cotton, cane, tobacco and watermelons, as they had at home, and in due time found, also, that they could grow upland rice successfully.

In growing rice they plow the ground, sow the grain as we do wheat, and harvest it in the same manner. It is not necessary to flood the ground with water, as is done in the southern part of the United States. The average rainfall in this section is forty-five inches per year, as compared with thirty-two inches in the United States.

While they raise on an average of one and one-half bales of cotton to the acre, and are successful with rice, tobacco and cane, one of their chief products is watermelons, and for this reason Villa Americana is known as the watermelon city of Brazil, over 2,000 cars of the luscious melons being shipped every year.

One of the oldest of the settlers, a Mr. Pyle, formerly of Georgia, told me that in one day he had hauled and shipped forty-five six-mule wagon loads of melons. During the melon season long lines of wagons stand waiting their turn at the railway station in Villa Americana.

One of the photographs I secured shows a small boy standing beside three prize watermelons, the largest of which weighed eighty pounds. If there was any one place where my colored serving man, Charlie, felt perfectly at home, it was at Villa Americana among the watermelons. It was all I could

THE BOY AND THE MELONS AT VILLA
AMERICANA, BRAZIL.

HAULING MELONS TO THE STATION, VILLA AMERICANA, BRAZIL.

do to get him to leave the town. I secured several snapshots of him with his ebony face buried in different big melons, but on looking for them later I failed to find them. Charlie was especially fond of those pictures, spending hours looking at them, and I am inclined to believe that one day on our way home he was so moved by the sight of his features submerged in a particularly juicy melon that he ate the films!

The American settlers at Villa Americana have built schools, churches, and good roads, and have raised the standard of citizenship in this part of São Paulo. However, only about twenty of the old families are left, the others having become extinct, or returned to the United States.

One of the typical families of the settlement is that of Charles M. Hall, who has prospered financially and otherwise. He has devoted his energies principally to the raising of sugarcane, only a limited quantity of which is grown, because there are no sugar refineries to use the product. The principal use of

the cane has been for the manufacture of rum to sell to the natives.

Needless to say, Mr. Hall in time became quite wealthy, and as his wealth grew he became public-spirited. Among other things he did was to build a Protestant church, which is used jointly by the Presbyterians, Methodists and Baptists. At a missionary meeting in Villa Americana a large number of Presbyterian ministers were present, and Mr. Hall and his family, which included four daughters, took a great interest in these preachers and their work, an interest which culminated in each of his daughters falling in love with and marrying a Presbyterian minister.

I had the pleasure of meeting three of the couples at Mr. Hall's while there. The fourth son-in-law died some years ago of yellow fever, and his wife went back to his home in Virginia. In the course of conversation at dinner it was suggested that "mother had raised the girls for the ministers," to which all agreed, and I added that evidently father had raised the price. There was no contradiction to this, though I observed some suppressed smiles I did not quite understand—for at that time I did not know that father was so extensively engaged in the manufacture of cane rum.

Later in the afternoon I mentioned the remark to an old American and he laughed till he burst off a few buttons. He said I had hit the nail on the head, and then proceeded to give me the history of how Mr. Hall had gained his wealth.

I discovered that many of the American families had changed their names by adding Portuguese affixes or suffixes so that they could be easily pronounced by the natives. In simple American names vowels are frequently silent in the pronunciation; in the Portuguese language every vowel has a sound, and the changes were necessary so that the natives could handle the names easily.

In my judgment the Americans of this colony gained nothing but temporary peace of mind by leaving their own country. Many of them have been successful, but they would have been as successful in Alabama and Georgia, and the increase in the value of land has been greater in those two States than it has been in Brazil. Slavery was abolished in Brazil about twenty

ENTRANCE TO THE GREAT MUSEUM AT SAO PAULO. A
MONUMENT TO THE REPUBLIC OF BRAZIL.

years after they went there, so they were forced to contend with the same labor conditions they would have had at home.

I found a condition existing in this region that made me stop and think. All over South America I had observed that there was more or less of the mouth and hoof disease that attacks cattle, although in the old wild condition cattle grew and thrived to the full extent where there were grass and water for them. With the importation of finely bred cattle, however, came an increase in cattle diseases in all localities.

At Villa Americana the conditions seemed excellent for stock; the climate is fine, there is plenty of water and grass and the elevation makes the drainage perfect. However, the dread mouth and hoof disease followed breeding up the cattle, and they discovered that it was necessary to breed downward and return as near to the original stock as possible, when the disease disappeared.

My observation in tropical Africa, while conducting the *Saturday Blade's* balloonograph and shooting expedition, was that the hump-backed cattle belonging to the negroes, which were not crossed and bred up, were free of disease, while the high-grade cattle, bred up by imported stock, were subject to

many diseases and died so rapidly that sections, sometimes fifty to one hundred miles in extent, were quarantined.

The city of São Paulo reminds me very much of a prosperous German manufacturing city, though the laborers are principally Italians. The manufacturing institutions are varied, rather than large, running through the whole list of human needs, and the manufacturers are prosperous, as they have the benefit of an almost prohibitive tariff. Wages paid to employés are better than in any place in Europe, and in some instances are almost equal to those in the United States, and the working-men live well.

But little of the manufactures are exported, the home demand being equal to the output and the prices high. São Paulo is the richest State in Brazil, and if separated from the republic and its taxes, of which it pays a very large proportion, it would possibly be the most prosperous independent nation in the world on account of its natural products. The one item of coffee alone produces \$120,000,000 a year.

The city of São Paulo has grown from 80,000 inhabitants to 500,000 in the short space of ten years, which is an indication of its prosperity. There are a number of beautiful and

THE SPLENDID MUNICIPAL THEATER, SAO PAULO, BRAZIL.

costly buildings, among which may be mentioned the Municipal Theater, which has just been finished at a cost of \$3,000,000.

The street car system is owned by a Canadian company, which also furnishes electricity for many of the manufactories. The street cars used are huge affairs, and either they are too wide, or some of the streets are too narrow, for in several places the cars project over the sidewalks to the menace of pedestrians. Coming over the crest of a hill the front end of these big cars rears up like a horse prancing on its hind legs, and there is a terrifying thump when the front trucks over-balance the rear end and drop back to the rails.

The street cars of São Paulo have killed many persons, which, together with the fact that the company refuses to pay over fifty dollars for any one death, has caused considerable sentiment against the corporation, and it is having a difficult time in securing a renewal of its franchise. The manager of the system is a Chicago man, and from what I learned I imagine that he "has troubles of his own."

In São Paulo I had the pleasure of meeting the American vice consul, Mr. Lee, and his interesting family. Mr. Lee married a beautiful and talented Brazilian lady, and is a successful merchant, in addition to attending to the requirements of our Government in a highly efficient manner.

Foreign capital has done much for Brazil in the past, but it is somewhat different now. In former times every new enterprise was

given a welcome and concessions were easy to secure, but now the wealthy natives are jealously guarding against foreign capital securing anything worth while. This is especially true in regard to railroads, both steam and electric, and in hydro-electric development.

The hotels in São Paulo are abominable, and it was almost impossible to get rooms. This condition was reversed in Rio de Janeiro, where there is apparently less "boom" than is noticeable in São Paulo. At the hotel in Rio where I stopped I counted twenty-eight Americans seated on the veranda one evening, and all praised the conditions there.

São Paulo has many educational institutions, the most popular of which is McKenzie College, which was established by a

AMERICAN VICE-CONSUL, MR. LEE, AND HIS FAMILY, ON THE
VERANDA OF HIS RESIDENCE, SAO PAULO.

WATCHING A RUGBY FOOTBALL GAME AT SAO PAULO, BRAZIL.

Canadian. It is patronized largely by the Americans, who send their children to it on account of its superior educational advantages. This institution has a first-class technical department and has graduated many high-class engineers. There is a great demand throughout all South America for engineers who can speak Portuguese and Spanish, a demand that is being met by men of English and French descent, there being a tendency among the native Portuguese and Spanish young men to become "doctors" of law or medicine, or to take up politics. They do not fancy the hardships encountered in the life of an engineer, preferring the ease of city life.

There is a very large colony of English people in São Paulo, as was evidenced by a Rugby football game I saw there. The immense crowd was just as enthusiastic as any you ever saw in the United States. Horse-racing is well patronized in this region by the public, as are other outdoor sports.

CHAPTER XXXIII.

IN SOUTHERN BRAZIL.

I ONCE knew a country merchant who had a sign on the door of his store which read, "Come in Without Knocking. Go Out the Same Way." Good advice, especially for personal and private matters, but one could hardly give a valuable description of a country without some "knocking." If competition is the life of trade, criticism is the life of truth. However, in describing Brazil I find it difficult to keep from continually praising, since the beauty and natural advantages of the country are so great. Nevertheless, they have bad and foolish people in Brazil the same as in other countries, and it is Heaven only to people who "get to Heaven" by knowing how to make one on earth.

No story of Brazil would be complete without special reference to the southern part which, by reason of its geographical position, belongs to that section of South America where cattle raising and agricultural pursuits are the greatest source of wealth. The development of this section of Brazil is of vital interest to the people of the United States, for the prices of grain and live stock are in a great measure controlled by conditions in Argentina, Uruguay, Paraguay and southern Brazil, because they are our competitors in the markets of the world.

The section is divided into three States—Paraná, Santa Catharina and Rio Grande do Sul. Originally Paraná was a part of São Paulo, from which it was separated in 1853, during the reign of Dom Pedro. Possessing an area of 86,000 square miles—larger than the State of Minnesota—Paraná has two distinct zones; the lower, consisting of a strip of land along the coast, is semi-tropical and produces all the fruits and vegetables of a climate that is always warm; the upper zone consists of plateaux which have the climate and soil of

IMMIGRANTS IN FRONT OF IMMIGRATION BUILDING, SAO PAULO, BRAZIL.

the temperate zone, and yield the products usually harvested in such latitudes.

The series of plateaux, which stretch westward from the coast range of mountains to the Paraná River, is the most thickly settled section of the interior, and is in a flourishing state of cultivation. The capital, Curytiba, and the farming communities, are situated on this table-land, the western portion of which is especially adapted to cattle raising. This section of the country is well watered. That portion of Paraná which lies along the seashore is generally flat and marshy, and the climate less agreeable than that of the interior. This State, which possesses area and resources sufficient for the maintenance of a population of many millions, should attract an increasing tide of immigration. Its progress and prosperity depend only upon the increase of population—which at present does not exceed 550,000—and the extension of railroads to give it efficient transportation.

From Paranaguá, the seaport through which the main traffic of Paraná is conducted, a railway stretches back into the interior, curves around to the northeast after leaving Curytiba, and at length reaches the city of São Paulo. The road is a masterpiece of engineering and was built in 1883 by a Belgian corporation. A trip over this line affords a view of unusual scenic magnificence.

Curytiba, the capital, is a city of about 55,000 inhabitants, and is situated on the plateau, about sixty miles from the coast, at an elevation of some three thousand feet above sea level. It is one of the largest cities in southern Brazil. It is a thoroughly modern town, with spacious, well-paved streets, lighted with electricity and traversed in all directions by street cars.

On the plateaux barley, oats, wheat, rye, corn and potatoes are cultivated, and grape raising for the production of wine is highly developed. This State possesses exceedingly valuable forests and mines. Large fortunes have been made in the *yerba maté* business, which flourishes all through the State where the altitude is above 2,000 feet.

Paraná ranks eighth among the twenty-two States of Brazil in the value of its export trade, and with the completion of

projected railroad lines, affording better transportation from the interior, will take a still higher rank.

The State of Santa Catharina, which lies south of Paraná, is only about half the size of the latter, and as its surface corresponds to that of Paraná the pursuits of the people and its products are quite similar, though leaning more to the tropical on account of its longer coast line and consequent greater area of low land where the weather is warmer.

The fertile soil and salubrious climate of Santa Catharina make it especially adapted to colonization, and nowhere in Brazil have the foreign communities flourished better. Considering its size, Santa Catharina is better supplied with railroads than any other section of Brazil, and more lines are projected.

Florianopolis, the capital of the State, is situated on an island by the same name. The city faces the mainland, from which it is separated by a strait about five miles in width. It is one of the most picturesque and beautiful places in Brazil, its residence section being noted for the many beautiful homes that overlook the Atlantic.

To the south of Santa Catharina lies the State of Rio Grande do Sul, one of the most important divisions of Brazil. The chief revenue of Rio Grande do Sul is derived from the pasture lands, upon which graze thousands of herds.

The *xarqueados*, or slaughtering establishments, where the dried beef, called *xarque*, is prepared for market, present an interesting, though rather gruesome appearance when the work is going on. The meat is dried in the sun, and an extensive area is covered with the racks on which the beef is suspended until ready for shipment. The dried beef exports amount annually to more than \$6,000,000, the establishments at the town of Pelotas alone slaughtering half a million head of cattle for this purpose. Without doubt this is the greatest "jerked meat" region in the world.

The climate of Rio Grande do Sul is moderate and agreeable, though the four seasons are distinct, as in all temperate zones. In the winter the cold winds from the Andes Mountains cause freezing weather in the more elevated regions, while in the summer the heat is sometimes extreme.

A CATTLE ESTANCIA IN RIO GRANDE DO SUL.

However, in Brazil, as in all countries, the effect of difference in temperature and altitude is noticeable in the character and energy of the people; residents of hot, low regions are apt to be less energetic and prosperous than people who live in high, cool regions.

They tell of a man in Indiana, who lived down on the Wabash bottoms, and who was so lazy and worthless that there was talk of burying him alive. He said he didn't care if they did. Finally he went to North Dakota and took up some land. He changed at once and became a tremendous worker and grew rich. Wishing to take life easier, he sold out and went to the Sandwich Islands where, in the heat, he grew almost too lazy to chew his food or dress himself and, as a consequence, lost all his money. A friend got hold of him and took him to cold Manitoba, where, report says, he is now "working like a nailer," and getting rich again. He was a human barometer, you see, as we all are in some degree. One sees the effect of climate reflected in the looks and conditions of people all through South America.

Most of the colonists of Rio Grande do Sul are Germans; in fact, they form a large percentage of the population, though occupying only about one-third of the State. Following the plan of sending European colonists to the section of Brazil best suited to them by reason of climate and labor conditions, the Germans naturally went to the highlands of Rio Grande do Sul. They prospered, and their friends and relatives came in droves; they formed communities, towns and cities where the German language is spoken and German customs prevail.

The chief seaport of the State is the city of Rio Grande do Sul, situated at the southern end of a large lake called Lagoa dos Patos, where a narrow strait connects the lake with the ocean. A big sandbar at the mouth of the harbor having been removed by dredging, ocean-going vessels now call at this port, a fact that has greatly aided the commerce of the State.

CHAPTER XXXIV.

NORTH AND WEST OF RIO.

EVERYBODY envies the traveling man—except the traveling man himself; he soon wearies of the constant change and starts on each successive trip with about the same eagerness that is displayed by a small boy who is forced to go to school when the fishing is fine.

After an extended stay in Rio de Janeiro, where I made many pleasant acquaintances and stopped at a really good hotel, I felt something like the traveling salesman—or the small boy—when I realized that again it was time to move on.

Journeying north from Rio Grande do Sul, my first stop was in the State of Espirito Santo, the capital of which is Victoria, one of the oldest cities of Brazil, though it possesses only about 20,000 population. This little State, which has an area of only 25,000 square miles, ranks third in Brazil in the production of coffee. Aside from coffee, its principal products are sugar and rice.

I was glad to note that the people of this State recognize the importance of good roads, and that the Government was sparing no expense in improving and extending the highways. Railway construction is also being pushed, and the Federal Government is improving the harbor at Victoria at a cost of \$5,000,000. In the opinion of many the harbor at Victoria, while smaller than that of Rio de Janeiro, is equally as beautiful.

Northwest of Espirito Santo lies the great State of Minas Geraes, which covers an area of 250,000 square miles in the heart of a rich mineral and agricultural region, the greater portion of which is an elevated plateau, forming part of the vast table-land of Brazil. Although it is one of the interior States, easy access to the ports of Rio de Janeiro and Victoria and excellent railway facilities afford every advantage in the

CURING COFFEE ON AN EXTENSIVE SCALE IN BRAZIL

promotion of trade relations, while in climate and fertility no State in Brazil is, probably, more favored.

The capital of the State is Bello Horizonte, a new and flourishing city of over 20,000 inhabitants, which is only ten years old. The city is remarkable for its wide, shaded avenues and the distinctly modern architecture of its buildings. In driving over its boulevards one is reminded of our capital city, Washington, D. C.

The Governor's palace is one of the handsomest State capitols in all Brazil, and was erected at a cost of \$500,000 gold. Not only is the city well paved, well lighted and provided with a complete system of electric street cars, but its waterworks system is a marvel and the drainage is perfect.

The fertility of the soil of this State permits the cultivation of all kinds of products, and upon the plains of the upper plateaux cattle raising is extensive. Since the introduction of modern implements and machinery here crops of all kinds have greatly increased.

One of the chief products of Minas Geraes is coffee, which is grown on an extensive scale in the southern section. In order to encourage the cultivation of cereals the State has adopted a protective tariff on all grains that can be grown on its soil. There are unlimited opportunities for the small farmer in this quarter of the world.

Railways traverse this State in every direction, there being upward of 3,000 miles in operation and more in the course of construction. Few countries can boast of such an abundance of mineral wealth as Minas Geraes, which derives its name (meaning "general mines") from the industry that first made it conspicuous.

Gold was discovered in this territory in the seventeenth century, since which time the amount of this glittering "root of all evil" taken from its mines is said to run into the billions of dollars. No accurate account was kept of the gold produced during the first century after its discovery.

The diamond mines of this State have been famous for nearly two centuries, the quality of its gems surpassing those of any other country. One of the historic gems of the world, the "Braganza," came from a mine near Caethé. "The Re-

One of the greatest mining swindles ever perpetrated in the United States was based on a mythical diamond mine in Brazil. Through false representations the promoters of this swindle interested a prominent Chicago man, the publisher of the largest daily and weekly paper printed in a foreign language in this city, and he was made president of the corporation. Because of this man's connection with the enterprise, hundreds of his friends and countrymen invested in it, and after the usual wait for returns on their investment, the bubble burst and the swindlers fled, leaving the honorable man they had used as a tool to face the swindled investors, and he felt the disgrace so keenly that it ultimately resulted in his death.

While in Brazil I inadvertently ran across one of the men who had benefited by the promotion of this fake company, and learned that the company had never owned a foot of ground in Brazil, that the pictures of its alleged diamond mines and other property were picked up wherever they could find them, and that all its literature was faked for the purpose of securing investors in a project that existed only on paper.

To the north of Minas Geraes, and bordering on the Atlantic coast, is the State of Bahia, which has an area of about 200,000 square miles. It is rich in mineral resources, and new discoveries are constantly being made as the extension of railroads through the interior leads to the opening up of hitherto unexplored regions.

The State is rich in vegetation and the agricultural industries are in a flourishing condition; in fact, the ease with which a crop can be raised in this State gives rise to a condition one might call laziness (maybe the people are afflicted with the hookworm), for about all that is necessary to do is to put the seed in the ground and harvest the crop when it is ripe. Tobacco, coffee, cotton and rubber thrive in this "paradise for tired people." There are big sugar plantations, and cacao production reaches thousands of tons each year.

Bahia, the capital of the State, is on the Atlantic coast, about eight hundred miles north of Rio de Janeiro. It is the third city in point of population in Brazil, having about 280,000 inhabitants, of whom 60,000 are white and 220,000 are

THERE ARE 220,000 NEGROES IN THE STATE OF BAHIA. IT IS A "PARADISE FOR TIRED PEOPLE."

negroes. This proportion gives a good idea of the population of the entire State. In slavery days, Bahia (or San Salvador as it was then called) was one of the chief distributing points of the Portuguese slave traffic, and now, with the preponderance in negro population, little distinction is made between the races. In other words, this is one community where the black man is considered as good as a white man, and the races mix freely in social and business relations.

One instance will suffice to explain the conditions. At a reception given by one of the State officials I noticed a young woman who was unmistakably of negro descent. She appeared to be "the belle of the ball," and I made inquiry regarding her and discovered she was the daughter of a State official, having but recently returned from France, where she had been studying art.

Although only ten degrees south of the equator, Bahia has a balmy, beautiful climate. Many of the ignorant blacks go half naked all through the year. They are decidedly superstitious, and the "voodoo" doctor is a man of might in their estimation. They have great faith in the efficacy of real snake poison for certain ailments. They, of course, use it in greatly diluted form. In tests made with it in full strength it has been known to kill a rabbit in five seconds.

Northeast of Bahia lies the little State of Sergipe, which is the Rhode Island of Brazil. Although it covers only 15,000 square miles, it is very productive and supports a population of 450,000 inhabitants. The land lying along the coast is low and marshy, while that of the interior is elevated, drained by numerous small streams, and has a fine soil.

Aracajú, the capital, is a city of 25,000 inhabitants, and is situated on the coast at the mouth of the Cotinguiba River. It is a typical tropical city, with the exception that the streets are broad and well paved. The principal towns of the interior are situated in the districts where the cotton and sugar industries flourish. The cotton mills are a big feature in the industrial life of this State.

Just north of Sergipe is the little State of Alagoas, which is about the size of Ireland. The productivity of its soil is

phenomenal, everything that belongs to a tropical land being grown with trifling cultivation.

Alagoas is noted for a wonderful waterfall, known as the Cachoeira de Paulo Affonso, which is superior in height and volume to our own Niagara. I viewed it with pleasure, but missed the persistent hackmen who make life a burden for the sightseer at Niagara, and the spoony "honeymooners" one encounters at every turn there.

One does not notice much change in manners, customs or industries in passing from Alagoas to the State of Pernambuco, which is about the size of the State of New York, no matter how small it looks on the map. If one hasn't been warm before, one is here.

Pernambuco, the farthest city eastward in South America, is the capital of the State. It is often called Recife, a name derived from the narrow reef (*recife* in Portuguese means "reef") that lines the coast for a great many miles. Steamers

LIFE AMONG THE NATIVE BLACKS IN THE OUTSKIRTS OF PERNAMBUCO.

that draw more than twenty feet of water do not attempt to enter the harbor except at high tide, and many of the larger boats do not enter, unless they are to receive or discharge a large cargo.

The town is divided into three sections separated by lagoons, across which are substantial bridges, and the population, estimated at 200,000, is principally negroes, though I made no attempt to count noses to ascertain the exact proportions.

Hotel accommodations in Pernambuco are good—if you do not expect too much. If you have just come from home and are accustomed to scrupulous cleanliness, excellent service and fine cooking, they will appear meager and dirty. But if you are on a long trip through the different countries of South America, where you encounter every condition from the most luxurious comforts to sleeping on the ground in the heart of a tropical swamp, the hotels of Pernambuco will not seem so bad. If you are very hungry, you may act as if you enjoy the food, and if you sprinkle insect powder between the sheets of your bed the chances are that you will also sleep.

From Pernambuco the large steamers sail directly to Pará, near the mouth of the Amazon, and being satisfied with my investigations of the East Coast, I took boat for that city, eager to see the “King of Rivers,” and the great valley that may justly be called the “Mother of Rubber.”

CHAPTER XXXV.

PARA AND THE AMAZON BASIN.

OF ALL the Brazilian States, Pará has the longest stretch of seacoast, nearly seven hundred miles. We passed a number of lighthouses as we voyaged toward the capital. Evidently the pilots need protection in these waters, especially on account of the great river-bars and shifting islands of sand in the vicinity of the mouth of the Amazon. It is a region of tremendous tides and currents.

In speaking of the city of Pará, I am tempted to call it "Pará the Beautiful." In Brazil they have a saying which runs, "Who goes to Pará stays there." This will express to the reader more, perhaps, than if I attempted a long description of the place. In short, it is considered one of the most delightful residence places in northern Brazil. Its public buildings and homes are unusually attractive, and it seems much like a city built in the midst of a great tropic garden. Pará lies back of a beautiful and spacious bay, on the waters of which come and go sea and river craft of all sorts. Wealth has poured into Pará in recent years, and its results are very apparent. It has a population of over 100,000. Its boulevards and parks are uncommonly fine, and they have an opera house here, the Theatro da Paz, which is one of the most sumptuous in South America. Excellent European companies are engaged by the Government every season, to give a series of operas in this theater. You see, they are very "up to date."

CHARLIE, MY FAITHFUL SERVANT.

The State of Pará is the third largest in Brazil. It is an enormous and rich piece of country. Some of the Pará statisticians have estimated that their State would give room to, and support, half the population of Europe. I will not dispute their conclusions, but the question is: Would they want half the population of Europe, if they could get it? They have room and freedom and opportunity now, and these always grow less as humanity crowds together.

Of one thing they can truthfully boast in Pará; it is the greatest rubber port in the world. Rubber alone contributes to the State and municipalities over twenty-five per cent of their incomes. The annual crop of rubber gathered in this State amounts to about 24,000,000 pounds, valued at from \$20,000,000 to \$25,000,000, according to the price prevailing here. However, they have besides rubber other rich resources in the

FASTENING RUBBER "HAMS" TOGETHER
FOR SHIPMENT.

State of Pará. Their output of cacao is a big one, over 6,000,000 pounds annually. Estimate it in cups of chocolate if you like; the result may quench your thirst.

The forest wealth of the State of Pará is enormous, and they have Brazil nuts in quantities unlimited. Then there are sugar, gold, dyewoods, precious stones, marble, slate, gums, tobacco, cattle, fisheries, hardwoods and other valuable things. It is a fine country to settle in, you see. Yes, and the climate is excellent; it is, for the most part, a country swept by the breath of the sea, though it is sometimes really hot, and there is a great deal of rain. But the great thing is rubber. In Pará, life is measured in terms of rubber; the docks are lined with warehouses for its handling, and the water-front is so crowded with it one smells it before he lands at the dock. Being so important a thing, we will use a little space in talking about it.

Human nature and this important industry cropped out in a recently-quoted conversation. Said one American to another:

"Did you hear about Muckraker's good luck?"

"No," replied the other. "Have things been coming his way?"

"They certainly have. He recently landed a big series of articles with a magazine, in which he denounced the automobile business and showed from every possible point of view that automobiles are bad things and ought to be abolished."

"That was fine. What did he do with the money?"

"Bought an automobile."

Probably he never would have bought one had it not been for rubber tires. In fact, when one considers the matter, it seems possible that we would still be in the "horse and buggy age" were it not for the strange and useful substance we call rubber. It is an odd, half-romantic story, that of rubber. The records say that early travelers, Columbus himself being one of them, noticed that the Indians of South America (which then was supposed to be a part of the East Indies) played ball with an odd elastic substance grown in the tropical forests, and prepared for use by a process known only to the natives. The red man also fashioned a crude sort of shoes from this substance, and bottles which could be squeezed together to eject liquid contents. The American aborigines, you see, knew considerable about rubber at a date when the balance of mankind were entirely ignorant of it.

The Spaniards called the stuff *goma elastica*—that is, elas-

tic gum, and at first it was regarded only with curiosity. However, it was presently imported to Europe and studied chemically, exciting great interest in the laboratories. This seems almost humorous, considering how common a thing rubber is today, but, remember, it was "funny stuff" and unknown up to that time.

However, the chemists presently found a way to shape the substance into tubes, which being elastic and yielding, were for certain uses, a great improvement on rigid pipes made of metal. Then, in 1770, an English chemist named Priestley discovered that the gum was an excellent thing for erasing the marks of the lead pencil. It rubbed out the marks, hence it was a "rubber," and having been discovered in what had been supposed to be India, it became known as "India rubber," and there you have the origin of its name.

After that it became more widely known, as experiments showed its commercial value, and in 1823 a man named Mackintosh discovered a method of waterproofing garments with the substance; then in 1839 Nelson Goodyear, in the United States, hit upon a method of combining rubber with sulphur.

which became known as vulcanization. After that this gummy product of the tropics entered more and more into commerce, until today it compares favorably with iron, copper and glass, in the diversity of its uses.

In fact, with the great numbers of vehicles demanded by modern life, existence would be well-nigh intolerable without this noise-deadening substance; besides, without it as insulation an entirely new method of telegraphing and telephoning would have to be invented. And our modern fire-fighting service, what would that be without rubber hose? One can hardly conceive how crippled human processes would be had we no such thing as the flexible pipe. Indeed, a whole chapter might be written on the uses of rubber alone, for it enters into the manufacture of scores of useful things.

But what is this curious substance? Why, simply ten atoms of carbon to sixteen atoms of hydrogen fused into a compound. It looks so easy that thousands of chemists have dreamed of producing artificial rubber, and thereby "making a mint of money." But the little trick of infusing life and elasticity into the artificial compound has not yet been found. You see, there is an immense difference between organic chemistry and artificial chemistry, the difference between God, or Nature, mixing the atoms, and man doing it. Just exactly what makes that difference is one of the mysteries that the mind of man has not yet solved, and probably it is well for us that we have not, and very likely never will.

Again, leaving the chemical definition aside, what is rubber? Simply the "butter" from the cream of the milk taken from a certain variety of tree or shrub. Sounds like dairy talk, doesn't it? Well, the simile is not so very far-fetched, since there is milk and then cream, and the coagulation of the cream into rubber is actually being now accomplished in some regions by a separator apparatus similar to that used in dairies.

The scientific name for this "milk" is *latex*, and it is not the same as the sap of the tree, for it runs in different channels and performs a different function. As this *latex* flows from the cut in the rubber tree, it has much the appearance of milk, and acts in the same way. Like milk, if left to itself,

it separates into a lower fluid with a creamy surface mass, which, when coagulated, is India rubber. So if you are anxious to enter the dairy business, go to Brazil, buy a grove, in the State of Pará or on the upper Amazon, and "milk the trees."

Rubber is essentially and always rubber, no matter from what quarter of the world it comes. The trees that yield it are peculiarly tropical, and, though there are rubber-producing plants outside of tropical forests, the great mass of the product is gathered from a comparatively narrow belt on both sides of the equator.

There are a great many sorts of rubber-bearing trees and plants, but the rubber tree *par excellence* is the *hevea* species, which is indigenous to the Amazon River basin and the vast watershed drained by the Amazon's tributaries. The *hevea* specimen is a large tree, often as much as twelve feet in circumference, which from its fourth year begins to yield milk, and after that may be systematically tapped for twenty years or longer. On account of the rich soil, the tropic warmth and abundant moisture, the forests of this species of tree are far larger and more general in the Amazon Basin than are rubber-

A RUBBER-BEARING TREE, SHOWING
THE SCARS OF PAST TAPPING.

bearing trees of any sort elsewhere in the world. Hence nearly one-half of all the rubber used by mankind comes from the Amazon region, and Pará is its greatest port of shipment.

Speaking of the Amazon brings me to consideration of this greatest of rivers. When one faces the task of trying to describe the Amazon River, one involuntarily feels the need of a new form of human expression, some sort of symbols that are bigger and stronger and more vivid than mortal words. When

A RUBBER PORT ON THE AMAZON.

an individual contemplates the Amazon his feeling is much as it is with almost every writer who stands beside the Grand Canyon of the Colorado and looks down into that indescribable gorge; it simply overwhelms the mind's power of description. One has to conceive of any specified thing by examples and comparisons, and there is no stream of water anywhere with which effectively to compare the Amazon. Why not use our Mississippi River in the United States for comparison? Well,

there are at least a dozen rivers fairly comparable with the Mississippi flowing into the Amazon—rivers each more than a thousand miles in length and from one to three miles wide, while the Amazon itself is 3,700 miles in length, and throughout its main body in times of flood is from thirty to one hundred miles in width and has a mouth nearly two hundred miles wide. In this mouth lies the island of Marajo, the

size of the State of Massachusetts, and the vast flood pouring out into the sea colors the Atlantic Ocean for two hundred miles. You observe, the Amazon River is one of the earth's very biggest things; in fact, like the ocean, it is so big one cannot really see it.

There is a reason for the bigness of this matchless stream, and the reason is that it drains

A BRAZILIAN BOA CONSTRICTOR.

a basin that is almost inconceivable in extent. Beginning as an impetuous mountain stream, away up in the Andes Mountains, sixteen thousand feet above sea level, and within less than one hundred miles of Lima, Peru, on the Pacific Ocean, it flows eastward clear across the South American continent, drawing into its majestically moving flood literally hundreds of rivers and thousands of smaller affluents. Like most big things, it is normally placid, save where its measureless volume bores into the liquid flank of the Atlantic; naturally at that point there is thunder and widespread watery turmoil from the shock and heave of the meeting of two such gigantic forces.

The first descent of the Amazon was made by the Spanish explorer Orellana, in 1541. The journey was a wild and romantic one. Among many fights and adventures, his party had a battle with the Tapuya tribe of Indians. The women of this tribe always help to do the fighting, and from this fact the river took its fanciful name.

But the bigness of the country that it drains! The Brazilian State of Amazonas alone, which lies within the basin, covers an area of 800,000 square miles, equal in size to all of the United States east of the Mississippi River. Then the great rivers that flow into it! The Rio Negro from Venezuela, the Madeira from Bolivia, the Juruá, Purús, and Javary from Peru, the Iça and Japúra from Colombia, the Napo from

PICTURESQUE BUT DIFFICULT TRAVELING ON AN AMAZON TRIBUTARY.

Ecuador, and dozens of others. Taking the Amazon itself, together with this vast radiation of navigable tributaries, you have unquestionably the world's greatest system of natural internal highways.

An attempted detailed description of so immense a country as the Amazon Basin would simply result in confusion to the mind. It is somewhat like trying to get a mental grip on the thing astronomers call "space," no mind was ever yet big enough really to grasp "all out doors," you know. Suffice it to say, the entire basin of the Amazon covers an area of seven million square kilometers. A kilometer is equal to about two-thirds of an American mile. Figure it out yourself, please. The writer of a book should not have to do all the work, should he? Of course, portions of this basin extend into Peru, Ecuador and Bolivia, but nevertheless the drainage is into the

Amazon, and the size and extent of that "rivulet" is what we are considering.

Reluctantly leaving the pleasant city of Pará, we sailed one morning for Manáos, the capital of Amazonas State, nearly one thousand miles up the Amazon River. All day our steamer was among the channels and green islands of the mighty river's mouth. In fact, we did not find ourselves on the main stream until the following morning. After that the broad liquid way stretched before us, seemingly without limit or end. Sometimes we caught glimpses of islands of floating waste, and then again long sweeps of water, much like the open sea. Then, again, we were sailing for hours along the shore, looking upon its wild tangle of verdure. The water of the Amazon is always "roily," being laden with the soil-wash of an almost incalculably great area. Its depth averages from seventy-five to two hundred and fifty feet, and, its width being so great, it is difficult sometimes to realize that one is voyaging up a river.

The journey by steamer up the Amazon is strange and impressive. In the main, it seems to be about twenty miles in width, but in periods of flood it simply "covers the whole country," hence the reports of its enormous width, which in a sense are true. At long distances there are towns on the high grounds, and splendid plantations, but, for the most part, the shores are endless reaches of forest and jungle. Time was when this "sea-river" was closed to other ships than Brazilian boats, but in 1866 the river was opened to the vessels and commerce of all nations. Now there are ships coming from and going to all parts of Europe and America from Amazon ports; there are lines of great steamers on the main stream, lines of somewhat smaller steamers on the big tributaries, and launches and small craft of all sorts on the affluent branches. Everywhere the smaller boats are gathering the products of the basin—rubber, cocoanuts, hardwoods, dyewoods, pelts, tropical fruits and other commodities—and bringing them down to Manáos and Pará and other ports. It is estimated that over 3,000,000 tons of products come down the Amazon every season, and yet the real productiveness of the region has scarcely been touched.

Just before we reached the State capital of Amazonas, our

steamer turned from the Amazon into the mouth of the Rio Negro (the Negro River). This river is of a rich, dark chocolate color, fifteen hundred miles in length, and is from three to five miles in width. It heads far northward in Colombia. Manáos, the capital, lies seven miles up this river from the Amazon. Manáos is a big, beautiful town, with fine architecture and every modern improvement. Lying near the center of the Amazon Basin, its commerce is large and its influence great. As in Pará, the warehouses and floating docks along the river-front are so given over to the handling of rubber that the very air is laden with its odor. But for the time being I was looking for rubber in its native state and not for the commercial handling of it.

Brazilian territory known to produce rubber covers 1,000,000 square miles, and up the Rio Negro, or upon almost any of the rivers, one soon comes to rubber camps and gatherers

in the forests. The existence of these people is strange, primitive, remote. The rubber gatherers are largely tame Indians, negroes and half-breeds.

I found that a systematic division of labor is made on all the great rubber estates, each collector being given his hut and utensils and a specified territory to work, the trees being connected by paths in a loop that takes the collector back to his starting point when his day's tapping is finished.

A RUBBER TREE AND GATHERER. NOTE
THE CUPS ATTACHED FOR CATCH-
ING THE "MILK."

I spent a day with one of these tappers. They are called *seringueiros* or *caucheros*, according to the region and language employed. Very early in the morning we took the trail through the forest; about us was a tangle of tropic growth, above us almost a solid roof of verdure; monkeys swung through the branches, gayly colored birds flew to and fro, the air was damp and warm. Each rubber tree that we came to the tapper gashed with a sort of little hatchet, fastening a tin cup under each gash. When nearly a hundred trees had been tapped, we returned, hot and tired, to his hut. Near evening we made the rounds of the rubber trees again, gathering the milk from the cups in a large vessel. The tapper then built a

fire, sprinkling it with palmetto nuts, that gave off a dense white smoke with creosote properties.

On either side of the fire were two forked poles, supporting a horizontal pole over the blaze. With his right hand the tapper slapped the rubber milk on the pole by means of a wooden paddle, while with the left hand he kept turning the pole round and round in the smoke. Larger and larger grew the ball, as he added fresh milk to that already coagulated, and in this primitive manner a kind of "ham" of rubber was formed, and was ready to be shipped by trail and canoe to the nearest river port.

Thousands, yes, tens of thousands, of these lonely men, in

A RUBBER GATHERER SMOKING THE PRODUCT INTO A
RUBBER HAM.

the forests of Brazil, are daily going through the routine of labor I have described, for most of the rubber used by mankind is originally gathered in this simple, primitive manner. In the State of Amazonas alone 150,000 men are engaged in the business of gathering and marketing these rubber "smoked hams" of the forest.

From statistics given by the Manáos Congress in 1910 I gather that the world's total production of rubber amounted in that year to about 146,000,000 pounds; of this some 78,000,000 pounds came from South America, chiefly from the Amazon Basin. Of this latter quantity 29,200,000 pounds came to the United States. You see we are largely riding on rubber these days, so it takes a great deal of it. All rubber is admitted into the United States free of duty, as is coffee also, so ninety-nine per cent of all the imports into the United States from Brazil are admitted free.

As for the Amazon Basin, some time it will support an enormous section of the human race. There are vast areas suitable for cattle raising, great tillable uplands, immense forests of valuable timber, priceless deposits of minerals. It is simply so big that mankind has not yet made much of an impression on it, and so wonderful no writer yet has fully described it.

CHAPTER XXXVI.

THE MADEIRA AND MAMORE RAILWAY.

I LEFT picturesque Manáos with some regret, for a long journey lay before me. I was bound for Porto Velho, far up the Madeira River, and to take a look at the wonderful railroad that American engineers have built to overcome the gigantic obstruction set in the path of navigation by the rapids and falls of the Madeira and Mamoré Rivers. Before leaving Manáos, one has to contribute a head tax to the funds of the State. I had to pay nine dollars tax for each member of my party; then with the steamship company, I had to deposit fifty dollars for myself and each of my men, to be turned over to the hospital board in Barbados for medical attention or funeral expenses in case we were sent to that island with the yellow fever. Of course, the money was ultimately returned to me, as we escaped the plague. This formality having been complied with, we were permitted to sail for the wonderland of the upper Madeira.

You see, an enterprise of first-class importance has been going on through several years far out in the very heart of the South American wilds. The world has known little about it, but it has been of immense importance to the world; it has meant the opening of a gateway to an extremely large area of rich and little known country, the making of a clear track for commerce between vast districts of Bolivia, Peru, and Brazil, and the mouth of the Amazon River and, beyond that, the civilized world.

Brazil, and especially the Amazon Basin, is a region of "appalling distances." In traveling there one at times grows impatient, but the saving thing is that usually one grows lazy. To be lazy on board ship is not only excusable, it is fashionable. By times, too, in these long stretches one mentally questions if "the game is worth the candle," if the object is

worth the time and trouble? Of course, one is after something; the question is, does he get it?

"Hans," said Gottlieb, "did you efer puy a golt brick?"

"Nein, nein," replied Hans. "I never puyed a golt brick, but once I puyed vat I thought vas one!"

Sometimes during my journeys in South America it turned out like that; the marvel I was seeking proved not to be gold, but just a plain "brick," but nearly always the object sought proved to be worth the price.

ONE OF THE RAPIDS IN THE MADEIRA RIVER, BRAZIL.

It was so in the long journey up the Madeira. For one thing, the traveler gets a very large and long-abiding comprehension of what the word "forest" means. One reaches Porto Velho with an expanded conception of eternity, for it must have taken a very, very long time indeed for God to have made so much timber! My impression was that on the Madeira River alone there was timber enough for all the nations of the earth, and I saw, naturally, but a "strip" of the whole.

Landing finally at Porto Velho, which is connected with Manáos by wireless, I found that the railroad was well along toward completion. The achievement, being so far from civilization, is stupendous. Only great quantities of cash and supreme "nerve" could have accomplished it.

Mankind must have tools with which to do its work, and two of its very greatest tools are steel and water; in other words, railroads, rivers and seas.

A man who has a sack of gold, but who is in the heart of a trackless forest, hundreds of miles from civilization, may be regarded as a lucky individual, but, strictly speaking, he cannot be accounted rich, for his gold will buy nothing there. His gold is no more than so many pebbles, until he transports it to a market where it can be exchanged for the world's commodities or placed to his credit in a bank.

This, as I have frequently mentioned, shows the importance of adequate transportation, which has been the one thing lacking in the interior of Brazil, and the portions of Bolivia and Peru about the Amazon headwaters.

Here is a domain half as large as the United States, amazingly rich in mineral and agricultural possibilities, yet huge areas of it have literally no commercial value at the present time, because there is no cheap way of getting the products to a market where they will be of value.

All of the navigable branches of the Amazon, through boat service, now pour into the channels of commerce a certain share of the products of the interior, but the crying need is railroads to bring the products to the great rivers.

The section of South America which is drained by the Madeira River and its tributaries has not shared in the prosperity, enjoyed in continually growing volume by the other portions of the great basin, because of the difficulty in transporting the products of the region down the Madeira River rapids. The area drained by the Madeira and its principal tributary, the Mamoré, is almost equal to that of the United States east of the Mississippi, and the products of this territory must either go down the Madeira to the Amazon, or be carried over the Andes Mountains to the Pacific coast. To cross the rocky ramparts of the Andes with steel rails, bridges

PULLING BOAT AROUND THE FALLS OF THE MADEIRA RIVER.

and tunnels is not impossible to modern engineers, but it is all down hill and far cheaper to go in the other direction.

The Madeira River is navigable for 660 miles from its junction with the Amazon, but beyond that, for a distance of 200 miles, it is a series of rapids and falls of such stupendous force that no device of man can be conceived of sufficient ingenuity and power to carry exports or imports on the river itself, to or from a point above the dangerous water where navigation is again possible.

For a century or more what products have come out of the immense region of the Upper Madeira, and what commodities have been taken into that territory, have been subjected to the expense of long portages around the various rapids and falls. Occasionally, during high water, the boatmen would hazard "shooting" some of the rapids, with the result that hundreds of lives and millions in property have been lost.

As far back as 1846 the importance of some safe and cheap method of passing these rapids and falls was realized and dis-

cussed, and in 1851 a United States naval officer reported that the sole obstacle to continued sailing from the Atlantic Ocean to Vinchuta, in Bolivia, was a series of nineteen falls and rapids in the Madeira and Mamoré Rivers. In 1869 the Governments of Brazil and Bolivia engaged a famous engineer to outline the work necessary for the construction of a railroad around these rapids, the same to be known as the Madeira and Mamoré Railway.

In 1871 work was begun on the project and continued some time, but the hardships and obstacles encountered were too great, and it was dropped. In 1878 the work was begun again by United States constructors and carried on for a year, with the result that a survey of 320 miles was cut through the dense forests, a train run on completed tracks for four miles, and right of way established by twenty-five miles of clearing.

It is no wonder that the work stopped again, for it was being done in the heart of a tropical forest—a region that was, perhaps, the most unhealthful in all South America. The time was not ripe for the completion of the enterprise, and it

languished until the United States demonstrated at Panama how to combat the diseases of the tropics.

The history of the last attempt to build the railroad, which is meeting with success, began in 1906, when the Government of Brazil entered into a contract for its construction with Civil Engineer Joachim Catramby of Rio de Janeiro. He entered into an agreement with Percival Farquhar, an American financier, and May & Jekyll were engaged in the United States to finish the construction for the company, which was incorporated in 1907 under the laws of Maine. Mr. Jekyll's home is in Ottawa, Ill. While the railroad is being built for the Government it has already been leased for operation to the company that is constructing it, for a period of sixty years, from January 1, 1912.

The completed railway will cost \$20,000,000, which is borne jointly by Brazil and Bolivia, and is to run from Porto Velho, on the Madeira, to a point beyond Villa Bella, in Bolivia. Shortly after I was there the third division of this important railroad was opened to traffic.

The road now reaches the door of Bolivia, at the mouth of the Abuna River, and saves thirty days' dangerous detour around the treacherous rapids. The traveler and his wares may now go comfortably in ten hours, without risk, where formerly a month of untold hardships was considered a reasonable time to spend on the trip. Formerly the charges were about \$300 per ton down the Madeira, and \$400 per ton in going up. The main construction headquarters are at Porto Velho. From 4,000 to 5,000 men have been employed on the work; of these 300 to 400 were Americans. They have a big hospital here, an ice plant and storehouses. The company drilled wells in order to have good water for the men, and quinine was bought by the ton. Three men were kept busy from morning until night making quinine pills. Despite every precaution, sometimes from 300 to 400 sick men were in the hospital, and ten doctors and a small army of nurses were kept "on the jump." The difficulties have been enormous, but pluck and energy have triumphed. I am proud that this great work has been driven through to success by North Americans.

When this road is entirely completed and open to traffic,

WARD IN HOSPITAL FOR NATIVE LABORERS ON MADEIRA-MAMORE
RAILROAD, BRAZIL.

the eastern side of the Andes will fully realize its long-cherished dream of direct outlet to all the ports of the earth. Outward will go the inexhaustible riches of the country, inward will go the manufactures of the world and also settlers who will reap the benefit of this enterprise, which has cost so much in money and lives.

The average American citizen who reads of this "land of promise" must not get the idea that life there is all sunshine and flowers, because I speak of its immense riches. Nature always protects her treasures in some way, and the pioneer who seeks them pays the price in some manner. This is natural law and cannot be escaped.

This territory is very close to the equator, and in the lowlands it gets hot and stays hot, while in portions of the highlands of the eastern Andes it gets cold and stays cold. The rainfall in some sections approximates 200 inches a year, which, you will observe, makes a pretty heavy shower almost every day, if spread over the entire year.

They have mosquitoes there, and oh, my countrymen! what mosquitoes! A bite from one of them is an event long to be remembered, even if it does not inoculate you with one of the dread diseases of the tropics. Every one carries his own mosquito netting, and woe to the man who falls asleep without first protecting himself.

A species of small spotted fly seems to exist by the millions; its bite is very painful and the effects of it last for days. There are small red ants, more numerous than one likes, having a bite that makes the skin feel as though it were being punctured by a red-hot needle. Aside from these there are numerous bugs and ants that make life miserable for the person who has no protection.

There is considerable game, and the jaguar is plentiful. Swimming is not an attractive sport on account of the numerous alligators, electric eels and the pyranha, a fish with rows of needle-like teeth, which is blood-thirsty and aggressive.

A JAGUAR, THE MOST DANGEROUS ANIMAL
OF THE SOUTH AMERICAN FORESTS.

Yes, there are Indians there, too.

Some docile, dirty and lazy; others are treacherous and likely to make trouble on the slightest provocation. You are never real sure of an Indian in his native state.

However, the "iron horse of commerce" is the greatest civilizer yet conceived by the human mind; the Indians may "turn tail" and flee into the forests when its shrill whistle is first heard; they may hide in the tangled tropical swamps and shoot poisoned arrows at it as it goes rushing by, but the time will come when they or their descendants will probably be shoveling coal into its fiery furnace or acting as brakemen on the train it pulls.

One railroad always means more; the pioneer road has been constructed into the heart of this fertile region, and as

the years go by branches will radiate from it in every direction, until the whole country is bound together by bands of steel, over which settlers will go in to take from the soil its vast riches. In every new country where the soil is particularly fertile there are forests and rank growth of verdure, and always in such regions, there are, at first, fevers and tormenting insects and miasmatic poisons. But man ultimately conquers all these things, for man by a decree of Nature has been made "lord of the soil," and in the centuries to come he will tame and civilize this region. That is evolution—that, I believe, is destiny.

And now I have to say good-by to Brazil. After traveling through a country so great as this, it is difficult to sum up one's impressions. To my mind the immensity of its area and the lavish way in which Nature has endowed Brazil, stand out distinctly. In these two items it justifies the title—magnificent. As for the achievements of its people, I found much to praise. They have some of the most beautiful cities yet built by man. The architecture of any country indicates the mental character of the people, and clearly a large class of Brazilians have good taste. I owe them thanks for my enjoyment of the beauty of their homes and cities, and I am grateful to them for many generous courtesies and helpful favors. I was a "stranger within their gates," and they treated me well. I thank them for it, and prophesy for their nation a great future.

THE THREE GUIANAS

CHAPTER XXXVII.

THREE UNIQUE COLONIES.

ALL the territory of South America is under self-government, save a relatively small strip on the northeastern coast, which is held under colonial rule by Great Britain, Holland and France. The ten republics (eleven, if the Republic of Panama be included) are the larger, stronger countries and, naturally call for greater space in a study of the continent. Nearly one-half of North America is under the dominion of a European king, while South America is almost wholly republican in government. This can be said of no other continent.

The territory known as the three Guianas drew its name from an old Indian tribe, and originally embraced what is now a part of Venezuela and Brazil. It was, in a sense, an immense island, bounded by the Amazon, Rio Negro, Cassiquiare and Orinoco Rivers and the Atlantic Ocean. This original tract of country was in size nearly equal to one-third of the United States. It was one of the very first portions of the Western Hemisphere discovered by white men. Columbus, only seven years after his first historic voyage, sighted

INDIAN GIRL, BRITISH GUIANA.

the coast of Guiana. It is not recorded that he went ashore. In this he seems to have been wise, as hundreds of later adventurers lost their lives in attempting exploration of the hot, unhealthy coast and jungle-filled valleys of this vast region. Sir Walter Raleigh, in 1595, attempted to lead an expedition into the interior, thinking the new El Dorado possibly was there. But he changed his mind; malaria and superheated atmosphere and tangled jungles seemed hardly favorable to the discovery of a blessed El Dorado.

The first real settlers in the region were the Dutch, who in 1581 founded a colony on that portion of the coast which is now British Guiana. Oddly enough, the Dutch first occupied British Guiana and the British first settled what is now Dutch Guiana. They got "swapped about" by the Dutch being driven out by the Spaniards in 1596, while, two hundred years later, the British drove out the Spaniards, and the Dutch got a footing on another portion of the coast.

IN A CANE-FIELD, BRITISH
GUIANA.

The average American confuses the word "Guiana" with "Guinea," and is about as much in the dark

regarding the Guianas, three European possessions in South America, as he is relative to Guinea, the African land. The early writers made the same mistake, and the little rodent, native of Guiana, was dubbed "the Guinea pig."

The colonies—British, Dutch and French Guiana—have been intimately associated, in history and commerce, with the West Indian Islands rather than with the continent. To reach them, the traveler usually goes to Trinidad, British West Indies, and transships to Demerara, as British Guiana is popu-

larly called. The Guianas lie on the forehead of South America between Venezuela and Brazil. They had a fair start with the other countries of the Western Hemisphere, but they have not won a creditable position in the commercial race. In this, even some of the Central American republics are ahead of them.

Many people believe that the three European powers controlling these colonies have given them little attention because of the scope of the Monroe Doctrine. British Guiana, to be sure, has been forced to "hustle for herself" since her youth; but this is Great Britain's policy with all her offspring. Dutch Guiana, on the other hand, has never been self-supporting, and receives assistance from the Netherlands. Poor French Guiana is forever in disgrace—the penal colony of the motherland. The colonies have suffered greatly from raids of privateers, slave revolts, capture by enemy, endemic diseases and insect pests. But in spite of all this, the foreign trade of the three countries reached \$28,000,000 in 1911.

In British and Dutch Guiana every acre under cultivation has had to struggle with the sea—a narrow strip along the coast rescued from mango swamps by an elaborate system of dams and dikes. The more habitable highlands are not yet settled, being covered by the primeval forest. In French Guiana, the coast swamps are replaced by verdant hills which meet the sea. Least loved by its European mother, it is by far the loveliest of the three Guianas.

BRITISH GUIANA.

Area, 90,500 square miles—Population, 270,000, including 125,000 Hindoos and many negroes—Natural products, sugar, rice, diamonds, rubber, rum, molascuit (cattle food)—Total exports in 1911, \$8,000,000—Imports from the United States about \$3,500,000 annually—Capital, Georgetown, population, 55,000.

In the old days "when Sugar was King," British Guiana had great hopes for the future, but the country received a hard jolt when Great Britain abolished the preferential bounty to her colonies. Still, sugar and its by-products—rum, molasses and

A BRITISH GUIANA HINDOO WOMAN, IMPORTED FROM EAST INDIA.

molascuit (cattle food)—continue to lead, representing seventy-five per cent of the exports of \$8,000,000 in 1911. Rice is now cultivated successfully, and 250,000 bags were exported during the season of 1911. The agricultural outlook for the season of 1912 was not bright, for the worst drought in forty years was scorching the whole northern section of South America at the time I was there.

British Guiana has a population of 270,000. The local increase has fallen off 10,000 in the last ten years, but the population nevertheless grows with the importation of "coolies" from India. There are now 125,000 of these Hindoos in the colony. They are indentured—the men for five, the women for three years—to labor on the sugar estates and in the rice fields, receiving twenty-four cents a day and furnishing their own food. When their term of indenture is past, the most of these East Indians remain in the country. They have lost caste in crossing the ocean, and know that they will not be well received in their home land. Instead, they remain in the New World as free men, cultivating their own land and even becoming employers of indentured labor themselves.

These Hindoos furnish the planter with cheap and reliable labor. The negroes are given to "strikes." On several oc-

CANAL IN STREET IN GEORGETOWN, BRITISH GUIANA, FILLED
WITH VICTORIA REGIA LILIES.

casions they have caused the riot act to be read, and in 1905 it required the marines of two British warships to subdue the striking longshoremen, who demanded a raise from sixty cents a day. Hindoo children, born in the colony, are unhampered by caste, the curse of India, and are intelligent and adaptable. Schools are maintained by the Government on the sugar estates.

Georgetown, the capital of the colony, lies at the mouth of the Demerara River. It was originally settled by the Dutch, and is below sea level, protected by a dike built and maintained, on shares, by the planters near the sea and the Government. Sea level is reached nine miles inland. The leading streets have wide trenches, bordered by trees and grass plots, and filled with gigantic *Victoria Regia* lilies. These magnificent night-bloomers, native to the Guianas, were discovered in 1835 and named in honor of Queen Victoria. It seems rather a pity, but

the lilies and trenches are doomed. Georgetown has voted \$100,000 for sanitation, and work begins with the filling in of all ditches to eliminate the breeding grounds of mosquitoes.

The capital, with 4,700 vessels clearing yearly, is a busy port. It is favored by cool trade winds from the Atlantic, and the houses are built, in part, of Venetian blinds called "Demerara shutters," which

A "NATIVE SON," BRITISH GUIANA.

invite the breeze but debar the sunlight. This style of architecture has spread over the Caribbean countries.

British Guiana had the fifth railway in the world, and it still has it, with a few short additions. Berbice, also on the coast, is the second city of importance. The rivers are the great highways, and navigation is being extended far up to the great forests of "greenheart," a valuable hardwood used in dock construction. The gold mines and diamond fields are reached by canoe from the head of steam navigation. It requires twenty days to journey to them, a great handicap to their development. Railways are now being projected to this little known region.

In the diamond fields, no true "pipe" has yet been discovered. The diamonds are small, the 26,000 stones exported last year weighing only 3,000 carats. The forest abounds in bullet trees, from which *balata* (rubber milk) is obtained, and innu-

merable other woods of value to commerce when transportation is made easier.

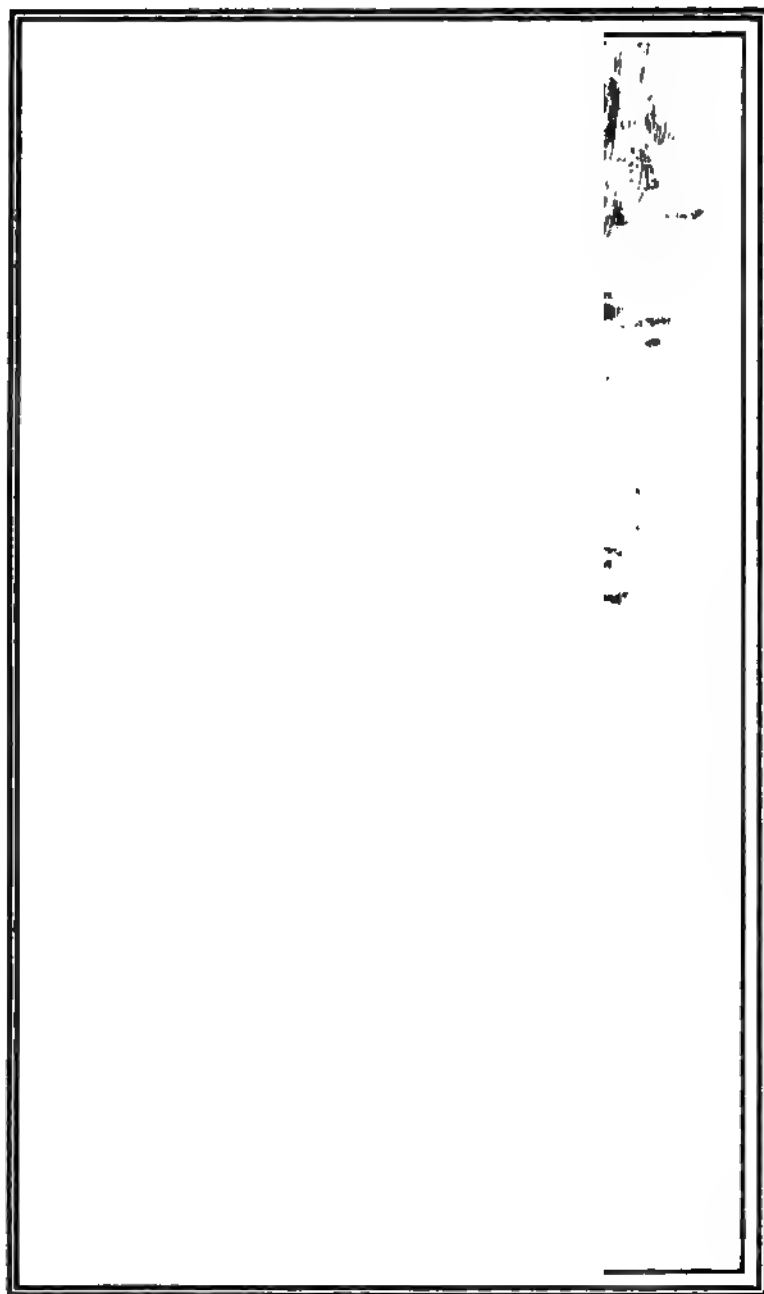
Far back in the heart of the highland forest are the Kaieteur Falls, numbered among the four great waterfalls of the world. Rest houses have recently been built along the river route leading to this wonderland, and travelers can reach Kaieteur without great discomfort. The river, nearly 400 feet in width, flows quietly to the brink of a precipice, and falls 741 feet, about five times the height of Niagara. With the tropical forest as a setting, the scene is a marvelous one, and in time this spot will become a mecca for Nature lovers.

To go back to the coast and to the colony's commerce, our trade with British Guiana amounts to twenty per cent of the total \$17,000,000. We send the sugar planters bone phosphate for cane fertilization, also kerosene, flour, lumber, canned meats, machinery and patent medicines. A tribute has been paid to our system of currency, for while the British pound, shilling and pence are in use, all prices are quoted in dollars and cents, and accounts are kept in United States currency figures for the sake of convenience. All the British colonies in this quarter of the world (with the exception of Jamaica) are arranging for special trade treaties with Canada, but sugar admitted free of duty into the United States will spoil all their plans.

DUTCH GUIANA.

Area, 46,000 square miles—Population, 70,000, of which only about 4,000 are whites—Natural products, cacao, sugar, bananas, gold, valuable woods—Resources but little developed, commerce small in volume—Total exports, \$3,000,000 in 1911—Capital, Paramaribo, population, 40,000.

When it comes to real hard luck among the colonies, "the Dutch have it." The settlers in Dutch Guiana reclaimed the sea, cleared away the mangroves, and extended their work up into the forests. They planted cacao, reaping bountiful crops, and a blight came along affecting about every tree in the country. The sugar-cane developed a disease all its own. The discouraged planters, hearing that every man, woman and



PARAMARIBO, DUTCH GUIANA.

child in the United States, after eating three dozen bananas each per year, called for more, took heart. They asked Mother Holland to give them a million dollars to start them in the "Banana Game." She consented, and the United Fruit Company agreed to purchase the product. Four new steamers were put in service by the Dutch line to rush the cargo to hungry New York. The tide of luck seemed to have turned for the colonists. The first banana crop was a huge success. Then, like a flash, the banana plants developed an incurable illness. "Mother Holland refusing another loan to her affected colony" is the last touching tableau.

There is still a little commerce, however. The exports amounted to \$3,000,000 in 1911—sugar, gold, a little cacao—with symptoms of general improvement. A large forest concession has recently been granted, to be worked for wood pulp for American paper manufacturers. There is one railroad in the country which extends sixty miles into the forest. The Dutch steamers, which conduct a fortnightly service between Amsterdam and New York, touch at Dutch Guiana, bringing cheese and gin and other "necessaries" to the colonists. There

A STREET LINED WITH MANGROVE TREES, PARAMARIBO, DUTCH GUIANA. THE TREES ESTIMATED TO BE
WORTH \$400000

BLACK CREOLE WOMEN, DUTCH GUIANA.

are not many passengers on the return voyage, as the few thousand Dutch people in the colony have little money to spend.

Of the 70,000 inhabitants, 40,000 live in Paramaribo, the capital. There are only 4,000 whites, the negroes, descendants of the slaves, forming the greater portion of the population. There are East Indians, as in British Guiana, as Great Britain formerly permitted the Dutch Guiana Government to bring out indentured Hindoos from India. This permission has been revoked, and now the planters depend on free coolie labor and on Javanese brought from the Netherlands' East Indian possessions.

Paramaribo is on a bank of the Surinam River, about fourteen miles from the sea. Surinam is also the Dutch name for the colony. Paramaribo is interesting to us as "the city which was exchanged for New York" when the British took New Amsterdam, the present site of Manhattan, and the Dutch got Surinam, which was formerly British. This was back in the seventeenth century. Paramaribo is a very picturesque old town, with peaked-roofed houses and shaded streets. One ave-

nue is lined with magnificent mahogany trees worth \$40,000. At least, an American lumber firm offered that price for the timber, but there is little danger of the great trees being destroyed, as the natives are enormously proud of them.

The black creole women are exceedingly picturesque. They wear a costume called the *kotto-messi* -a very wide skirt looped over a cord at the hips, a full, short blouse and a kerchief tied to produce a broad effect. In the market place, sitting on the ground before their wares, they resemble huge mushrooms. They speak a language called *Taki-Taki*, a weird mixture of

DR. BRADLEY, UNITED STATES CONSUL IN SURINAM, DUTCH
GUIANA, AT HIS MINE IN THE "BUSH."

many tongues. The language of Holland is known only to the small educated class.

There are a number of Jews in the colony whose ancestors fled to Holland when expelled from Spain in the fifteenth century. Of all the strange people to be found here, the Bosch (Bush) negroes are the most interesting to the traveler. They live in the forest, but a few are occasionally seen in town. Many years ago the planters sent their African slaves into the woods to escape payment when the tax collector made his rounds. The blacks escaped into the wilderness and never returned to the

plantations. They live just about as their cousins do in the wilds of Africa and are worshipers of Obeah. The Indians of the forest are not fierce savages, being mostly of the Arawak tribe, long allies of the colonists, but they are shy and keep away from civilization, preferring their primeval solitude. On a bank of the Surinam River, not far from Paramaribo, is a Moravian mission home for lepers. It was formerly supported altogether by the order in America, but now receives help from the Dutch Guiana Government.

FRENCH GUIANA.

A French penal colony—Area, 34,000 square miles—Population, about 39,000, of which 8,000 are prisoners—Natural resources, numerous tropical products, but little developed—Total exports in 1911, \$2,300,000—Capital, Cayenne, population, 12,000, mostly black.

We have all heard of cayenne pepper. Well, it does not come from Cayenne, the capital of French Guiana. But the colony did start the little red condiment on its mad career around the globe. Some thirty other varieties of pepper are



VIEW IN HARBOR, CAYENNE, FRENCH GUIANA.

indigenous to the country, which may have influenced the French Government to select this hot place as a domicile for its convicts. There are eight thousand prisoners there now! Twice a year the convict ship comes in from France with its cargo of wretches in steel cages. The death rate in the colony is terrific, so that two thousand yearly additions about fill the vacancies.

Prisoners receiving over a five-year sentence are required to serve an additional term of the same period as settlers in the colony. Although the mouths of the rivers are guarded and the forest is very nearly impassable, many prisoners, paroled on this second term, manage to escape, making their perilous

CONVICTS ON THE WAY TO WORK, NEAR
CAYENNE, FRENCH GUIANA.

NATIVE HUMAN TYPES OF FRENCH GUIANA.

way to Dutch and even to British Guiana. In Paramaribo there are agents of a society formed in France, whose members are friends of the convicts, and through this agency the refugees are provided with money and clothes to further their efforts to escape.

Not far from the city of Cayenne is Devil's Island, where Dreyfus, the famous Frenchman, was confined for a long period behind a barricade. The island bears an unusually good reputation for healthfulness, the local name being "Island of Health." Formerly the French Government sent many prisoners to New Caledonia, but the convicts lived so long there that the place was abandoned. There is no danger about Cayenne. It holds the record as a death-trap! This, however, is due in great part to the treatment accorded the prisoners. Forced to labor in the fierce tropical sun on scant rations, they quickly succumb. The convicts have built some thirty miles of

roads in the country, but there is practically no agriculture nor cattle raising.

The colonial appointments are political, and there is much criticism regarding the method of government. With timber and cabinet woods that compare favorably with those in other tropical lands, there has been practically no attempt to develop the forest resources. There is not a mile of railroad in the country. The French Guiana forest has a unique product—oil of rosewood—which is extracted and exported. Seven factories for distilling the oil are now in operation, and in 1911 over \$100,000 worth of oil was sent to France to be used as a substitute for attar or "otto" of roses. It brings \$1.75 per pound. The forest streams are also rich in gold, the principal export, amounting to \$2,000,000 of the total export of \$2,300,000. This gold is secured by the hand labor of negroes. As there is an export tax on gold dust, many goldsmiths are employed in the mining sections working the gold dust into crude jewelry. The home-coming miners are fairly ablaze with ornaments, and avoid the tax.

MARKET WOMEN OF CAYENNE, FRENCH GUIANA.

The gold streams are reached only by canoe, a long journey with many portages, and this lack of transportation greatly hinders the growth of the industry. It costs \$150 to convey a ton of provisions to the mines. An island off the coast contains phosphate rock, \$50,000 worth being shipped to America in 1911.

Cayenne, the capital, is situated on an island very near the coast. It has a population of 12,000, mostly blacks. There are a few whites, French colonial officers and their families—a homesick lot of exiles, longing for the lights of "gay Paree." Once a month a steamer comes in from France. The remainder of the time the isolated ones depend on the cable for home news, and count the days before their return to civilization. But the convicts? Alas, they seldom return.

VENEZUELA

Area, 393,870 square miles, or over five times the area of the great State of Illinois—Population, in 1911, 2,713,703, about fifteen per cent Indian, estimated—Chief natural resources, coffee, cattle, valuable woods, rubber, chemicals, cacao, gold, asphalt, iron, silver, copper, diamonds, pearls, petroleum, fruits—Exports, 1911, \$23,000,000, imports, \$17,000,000—Exports in 1911 to United States, \$7,635,256; imports from United States, \$5,200,000—Army, peace footing, 9,000, war footing, 60,000—Navy, 6 ships, 300 officers and men—Capital, Caracas, population, 75,000.

CHAPTER XXXVIII.

AN INTERESTING COUNTRY.

OF ALL the republics in South America, Uncle Sam has had the greatest opportunity for demonstrating his friendship toward his nearest neighbor, Venezuela.

Two monuments stand today in Puerto Cabello and Maracay to the memory of American volunteers who gave their lives to help free Venezuela from the yoke of Spain. Uncle Sam was the first to recognize her as an independent nation. When an earthquake of 1812 killed 30,000 and laid her capital in ruins, he took \$250,000 of his strong-box and rushed to her aid. He offered a refuge to her great hero, Bolivar, when banished by political enemies, nursed him through a long illness, and, after his death, returned the remains, with honors, to his grateful countrymen.

But the proof of more than friendship came in our times, 1895, when Tio Sam (Uncle Sam), at the risk of an appalling war, halted Great Britain and forced her to restore to the Venezuelan map the coveted Orinoco territory.

STATUE IN MARACAY, VENEZUELA, TO
AMERICANS WHO FOUGHT TO FREE
VENEZUELA.

This readiness to extend the helping hand across the Caribbean Sea has, at times, caused his motives to be impugned in some quarters. Venezuela, however, has royally embraced the opportunity of entertaining Secretary of State Knox, the first call from a member of Uncle Sam's official family, thus demonstrating her appreciation of his long list of favors.

Venezuela appeared on the map at an early date in New World history. Columbus, rounding the Islands of Trinidad on his third voyage in 1498, sighted the mainland. One of his officers went ashore and planted the flag of Spain. A few years ago the Venezuelan Government erected a monument at this point, naming the territory "Cristobal Colon."

The year following the discovery by Columbus, the Spanish sailor Ojeda, accompanied by Amerigo Vespucci, the Italian pickle dealer whose name through accident designates the lands of the New World, skirted the whole coast of the country. On entering the great Gulf of Maracaibo he noted an Indian village built on piles on its half-submerged shores, the natives using canoes for communication between huts. A powerful imagination, inherent in the Spanish race, caused Ojeda to fancy a re-

ERECTING ARCH IN HONOR OF VISIT OF UNITED STATES
SECRETARY OF STATE KNOX, CARACAS, VENEZUELA.

semblance to Venice, hence "Venezuela" or "Little Venice." Thus an inappropriate name has clung to a mountainous region larger than the combined area of Oklahoma, Arkansas, Kentucky, Tennessee, Alabama, Mississippi and Louisiana.

Venezuela, with her 390,000 square miles, stands sixth, or just halfway, in point of size, among the eleven republics on the Southern continent. Few lands are more favored by nature. The resources are enormous and as yet hardly touched. The concern of the United States is a close one and must become still closer with the completion of the canal.

THE CATHEDRAL TOWER, CARACAS, VENEZUELA, ILLUMINATED IN HONOR OF SECRETARY OF STATE KNOX.

While recipient of so many official favors from our Government, Venezuela has received but little attention from the individual American. Today there are less than half a dozen men, born under the Stars and Stripes, who are permanent residents of the country. Germany and Italy transplanted many sons to the Caribbean shores a generation ago, and their children are now the thriving merchants of the republic.

In the past the American manufacturer has depended on "buying demand" rather than on "selling effort" in placing his wares, but of late he is making a belated, though fairly successful, endeavor to secure the trade which is his by right of geographical location.

We will soon need the products from Venezuela's fertile lands to eke out our larder. As the man from the West remarked, "We're willin' to go ragged, but we must eat!" Since all commerce is a matter of exchange, it is well that American

manufacturers are delivering some monkey-wrenches and typewriters along with our orders for beef and coffee.

The Venezuelan Government has recently collated its trade figures for 1911 and is jubilant over the showing. The total trade advance over the previous year was \$10,000,000, an increase of over twenty-five per cent—startling figures!

While Uncle Sam sold goods valued at over \$5,000,000, an increase of \$1,500,000, Great Britain's sales advanced over \$2,000,000, topping our figure by \$200,000. Germany, though third, with \$3,500,000, had an increase of \$1,250,000. Venezuela's exported products were valued at \$23,000,000, imports \$17,000,000, a most satisfactory balance of trade in her favor. This argues well for the country's commercial future.

"La Guayra?" said the American Canal Zone doctor, when I asked about Venezuela's front door. "It's a fever hole. We quarantine against it!"

"La Guayra!" says the native of the country, "*Bonita! Preciosa!*" but complimentary adjectives fail him. He kisses his hand to it.

I have found no South American port more picturesque. Here the mist-crowned Andes bathe their feet in the sea. Like nimble Alpine goats, the little pink and blue houses of the old town climb the hills and overhang the cliffs. Viewed from the Caribbean, the few level streets by the shore are scarcely visible.

"How on earth do we reach Caracas?" asked the man next to me as we came into port. I pointed to a trail straight up to the summit of the mountain.

"That must be the old Indian path," I said, "for Caracas lies just over that wall. But the captain says we zigzag up, now, the long way round by rail."

In days gone by La Guayra's harbor was an open roadstead and a terror to seamen. Now a massive breakwater protects the safe little port where ships dock.

In 1885 a British company had the foresight to secure the exclusive concession for dock privileges, and now all shipping must pay it tribute. True, the company spent \$5,000,000 in dredging the harbor, constructing the breakwater, and building the railroad which brings passengers and freight from ship to custom house, but the returns have justified the outlay. Each

passenger is taxed forty cents for a two-hundred-yard ride, while his baggage is assessed on the kilo basis.

The railroad employés deposit the baggage within the custom house, but are not permitted to bring it out to the platform where it can be received by the cartmen after inspection. A special mob of porters has the exclusive privilege of moving luggage thus fifty feet, relieving the protesting passenger of all that is left of his loose change.

The custom examination is no perfunctory one, for Vene-

VIEW OF THE DOCKS AND HARBOR, LA GUAYRA, VENEZUELA.

zuela derives a large proportion of her revenue from import duties and the collecting of this tax has become one of her most trying problems. Fate has destined this situation to be irritating, for the country's long shore line is fringed with coves attractive to the smuggler, while just off the coast are several islands under European rule, enjoying practically the privilege of free ports.

In Willemstad, on the Dutch island of Curaçao, and in Port

of Spain, on the British island of Trinidad, there is a strong incentive to slip goods over Neighbor Venezuela's high tariff wall, as is attested by numerous sailing craft to be seen in these ports—stormy petrels which go to sea in heavy fog and high gale, propitious weather for an unobtrusive landing. Venezuela has lately built the first of her coast patrol vessels and hopes to make it interesting for smugglers in the future.

La Guayra is a busy port with an average of thirty steamers a month flying the flags of seven nations. Over one of these lines—the “Red D.”—floats the Stars and Stripes, a rare sight in foreign waters. This company maintains a weekly service between the United States and Venezuela. The only other steamers connecting the two countries are those of the Dutch West Indian line via Haiti. All the other lines—British, French, Spanish, Italian and German—lace Venezuela to Europe.

In spite of its unenviable reputation regarding health conditions, La Guayra is now attracting American tourists by the shipload. While I was there the White Star liner, *Lurentic*, brought in four hundred sightseers, who were rushed up over the mountains by special train for a peep at the capital. The very next day the Hamburg-American liner, *Molke*, landed another lot of three hundred and fifty. Before the week was out, a second Hamburg-American ship arrived with four hundred.

As there were two cases of yellow fever in the port the arrival of so many tourists testifies that the average American will “take a chance;” also to the drawing power of Venezuela's attractions. She is probably the best advertised of all the South American republics.

And yellow fever is not the most dreaded scourge of her ports, either! Far from it! Not long ago bubonic plague held all this coast in its deadly grip, terrifying the medical world and earning the protest of the United States Marine Hospital Service.

“Venezuela must be cleaned up!” our doctors announced. “Otherwise drastic action will be taken!” The threat brought results, and today bubonic has disappeared, although sanitary conditions do not justify the belief that it is gone forever.

"Why do we go to Curaçao next? Why not to Porto Rico—it's just across on the map?" asked a fair excursionist. Well, why don't you go if you want to? Simply because Uncle Sam won't let you.

After browsing about for hours in musty curio shops, he considers you a fit subject for four days' disinfection in quarantine at Ponce, before allowing you to associate with his thoroughly renovated adopted children in Porto Rico.

You will not embarrass any of the 5,000 *porteños* (gatekeepers), as the inhabitants of La Guayra are dubbed by the people of the interior, if you inquire the use of the long white building which gleams among the cocoanut palms on the cape near the harbor. I tried it.

"That, *señor?*" rather proudly came the reply. "that is our new hospital for lepers."

"Are there many lepers here?" I asked, trying to conceal my horror.

"*Si, señor, bastante.*" (Yes, sir, enough.)

Heaven knows there are quite enough! Just why the Caribbean shores should exhibit so many of these wretched sufferers, beyond the pale of medical science, is still a moot point. Some have advanced the theory that the fish diet (fish which is sun-dried, where decomposition sets in before curing) is responsible for the disease, but "*quien sabe!*" (who knows!) as they say down here. Some action toward segregation has been taken, but progress seems slow in combating this most dreaded scourge of the Lands of the Sunlit Seas.

It is marvelous the change in climate you sometimes meet

TYPICAL WINDOW IN A VENEZUELAN HOUSE.

within a short distance. The suburb of Maiquetia, just out of La Guayra, is said to be several degrees cooler than the port. The many merchants who make it their home claim it is not only cooler, but more healthful. I found it decidedly warm. It is connected with La Guayra by a steam road which also runs three miles, in the other direction, out to Macuto, the favorite seaside resort. I decided to go out and look it over. The trip took about fifteen minutes, for which I was taxed twenty cents. The road skirts the shore and I saw

JUST IN FROM THE COUNTRY.

great numbers of fishing birds, a species of pelican called *alcatraz* in Spanish countries. They fly at an altitude of twelve or fifteen feet, then suddenly dive, landing their fish about every shot.

I noted a change of climate the moment we puffed out of La Guayra, and when I reached Macuto and was located in a front room of the leading hotel, with the salt breezes rolling in 'way from Santo Domingo, I decided I would stay a week.

It was "out of season," still the hotel was fairly well filled. Some *hacendaros*, or ranchers, were there with their wives and daughters, probably avoiding the fashionable season by preference.

The real season, December, January, February, brings the "society folks" from Caracas to this, their favorite resort. They spend their time driving, riding, bathing, and playing the omnipresent game of Spanish dominoes under the broad almond trees which shade the shore. They may also "take a chance" at roulette, for I stumbled on a dusty outfit in a back hall.

Bathing here is not conducted on the "American plan." Not at all! Here, as in other parts of Latin America, salt water bathing is indulged in for the tonic effect only, a sort of doctor's prescription. The bath house at the end of a little pier has two separate enclosures surrounded by piling, one for men, the other for women. There is no mixed bathing as with us. All morning long the ladies passed my hotel, wearing simple attire and broad-brimmed hats, trailed by maids carrying towels and toilet articles. The men made the pilgrimage with their towels, scarf-like, around their necks. No frolicking on the beach as in the U. S. A. No parade before the gaze of the populace! No, not in bathing costume! But there is a parade, quite a one, in the late afternoon and evening, on the broad cement walk, flanked by the hotel piazzas and the rolling surf. Here the latest Paris fashions are exhibited during the season, a military band is in attendance, and the resort takes on real social prominence.

I "hired" a carriage for eighty cents an hour and drove about the town. The many beautiful homes—really elaborate ones—surprised me. Each has its name, as at our resorts. "Mira Mar" (Sea View), is in evidence. This charmingly situated little town has about 1,000 inhabitants and supports three hotels.

I was astounded when I deciphered my hotel rate. Having been rather heavily taxed for luggage at La Guayra, and having paid twenty cents for a three-mile car ride, I was prepared for a stiff hotel bill. The rate for room and fare is eight *bolivars* a day. This sounds high, but when figured out, with a *bolivar* worth twenty cents—\$1.60 for a front room, three

THE BREAD MULE, OR TRAVELING BAKERY,
A COMMON SIGHT IN VENEZUELA

meals and view of the sea and mountains thrown in! I looked up the proprietor to see if there was not a mistake. No, there wasn't, and he frankly admitted that he was making money, and pointed to the annex he is building across the street. I am puzzled, for on the menu imported articles were listed; but much, of course, is home production.

Six varieties of fish were caught in sight of our dining-room, the broad veranda of the second story; the game we had was shot in the mountains just back of the town; meat, vegetables, coffee, fruit were from the country. Bread is made from wheat imported from the States, rice from South Carolina; cheese from Holland. There were delicious ices made from tropical fruits, that from fresh cocoanuts being especially fine, and all for \$1.60! The high tide of hotel rates has not yet reached Venezuela!

I left La Guayra at eight-thirty in the morning and reached the capital in two and a half hours. It is only seven miles as the crow flies, but twenty-three by rail. For years Caracas was reached only by a steep mule-trail and a roundabout cart-road, but in 1883 the La Guayra-Caracas Railroad, originally an American enterprise, was completed by British capital at a

cost of nearly \$100,000 per mile. It is a remarkable road, with an average grade of over four per cent and scarcely twenty yards of straight track on the entire line. The rails cling to the perpendicular surface of the mountain like vines to a stone wall. By this tortuous path the train crawls along the edge of precipices, reaching a height of 3,000 feet before losing sight of the sea. The view of La Guayra and the Caribbean far below, of bottomless chasm and noble mountain, is beyond all word pictures, and is alone worth the voyage to South America.

Caracas, the capital, is an old town. It was founded by the Spaniards in 1567 on the site of an Indian village. No city in the New World has a more beautiful situation. It lies 3,000 feet above the sea in a narrow, ever-verdant valley, walled in by towering, treeless mountains. Its climate is unrivaled—a place of perpetual spring. An American who has lived here for ten years told me that cold and heat are alike unknown. The city has had an eventful history. Since 1797, when the first movement for independence was initiated, it has been the scene of many an uprising and revolution. In 1811 the formal Declaration of Independence was proclaimed and in Bolivar, the great erator, the country "Great Colombia," self an independent

While nominally ing its government ezuela is in reality even the Governors

Independence was 1819, freed by Simon South American Lib- became a part of In 1830 it declared it- republic.

a republic, pattern- after our own, Ven- an autocracy, where of the thirteen States



STATUE ERECTED IN CARACAS IN 1911 TO COMMEMORATE THE CENTENNIAL OF THE DECLARATION OF VENEZUELAN INDEPENDENCE.

are appointed by the President. Strange as it may seem, *no President has ever actually come into power through an election, and no President has ever retired from office except through a revolution.* There is, however, a National Congress consisting of a Senate and House of Deputies, the former elected by the State Legislatures, the latter by direct vote of the people

Since becoming a republic, Venezuela has produced more "trouble" than any other nation, both for "home and foreign

ARCH OF LIBERTY AND FEDERATION, CARACAS, VENEZUELA

consumption." The brand designed for domestic use is labeled "Revolution;" that for the outer world, "International Complication." If you will look up the word "revolution" in your dictionary—you will find that it means "a going around." There are always enough revolutions to go around in this country. It has a record of over one hundred. There is a popular superstition that all South American revolutions are inspired by men claiming, in broken accents, that the United States is their



VENEZUELAN SOLDIERS.

fatherland—men who desire to sell nonexplosive cartridges and rifles which antedate the invention of gunpowder at exorbitant prices. This is a mistake. The revolutionary spirit is indigenous here.

While the constitution of Venezuela limits the presidential term to six years, Guzman Blanco managed to hold his grip on the affairs of the nation for nineteen. His rule was the heyday for the speculative adventurer

who came to the country to see what he could devour. To such, Guzman Blanco mortgaged the resources of the republic to provide the cities with plazas ornamented with statues of himself labeled: "The Illustrious American." After his dethronement the populace pulled down all these statues, an act which inspired the suggestion from a visiting Yankee that, in the interest of economy, all statues of future military Presidents of Venezuela should be erected in full uniform but with movable heads, to be changed with each administration.

If Guzman Blanco received some attention from the foreign press, it remained for Cipriano Castro to inspire miles of space in the newspapers of the world. For nine years this indomitable little man held his country under his thumb and the foreign powers at bay. Every minute of his long reign was eventful. He collected quarrels with other nations as a private individual collects stamps or coins. At one time or another he trod on the toes of nearly every civilized power. He insulted plenipotentiaries, canceled concessions and flouted foreign bondholders. With modern eight-inch guns mounted on the hills above La Guayra, he defied the warships of three nations.

We cannot deny Cipriano (otherwise "Slippery Elm") Castro a unique place in history. He monopolized the spot-light on the international stage from the hour he assumed a star rôle

in the cast. His rise was interesting. As a cattleman, of Indian and Spanish blood, in the wild mountainous region of Táchira, it was his habit, with other frontiersmen, to drive his stock over into Colombia whenever the tax-collector came around. A similar courtesy was accorded Colombian ranchmen in their hour of need. But the day of reckoning came!

The tax-collectors of the two republics united, and supported by troops, appeared simultaneously on either side of the frontier. Castro's cattle were seized, confiscated, and his ranch destroyed. Having no other means of livelihood, he raised the standard of revolt. His neighbors flocked around him, and at the head of this improvised army he fought his way to the presidency. Once in power, he announced himself "The Restorer." He did restore to Venezuelans about all the concessions granted to foreigners by previous administrations, but *Castro himself was chief among these beneficiaries*. It was not on foreigners alone that he preyed. No public utility, native or otherwise, escaped the "Restoration." By monopoly, forced sale and heavy taxation, the President and his favorites obtained a "rake-off" on every form of industrial enterprise. Salt, coal, coffee, cattle, sugar, rum, gold-mining, pearl-fisheries, matches, cigarettes, cigars, banks and railroads were all laid under tribute. All business had to pay for the privilege of being protected. The country was taxed to its last breath. A blight was cast on all industry and commerce.

But the army was not neglected. It received Castro's first attention. He found it a rabble of assorted titles with no specific duties and a little "shy" on shoes. Before his time it was no uncommon sight to see ragged soldiers begging food. The story is told of a Venezuelan general of those days, who ordered an advance for an attack on a village. Time passed, but no company appeared. Finally a scared messenger arrived.

"Why have the soldiers not obeyed my orders?" roared the General.

"They want to, your excellency," stammered the messenger, "but there are two drunken Americans down the road and they won't let the company pass!"

Castro worked wonders with the native troops. He estab-

lished an up-to-date military academy and made the soldiers loyal by paying what he promised. It is this strong organization of 9,000 men which blindly supports his successor today.

In 1908 Castro made his memorable trip to Europe to secure surgical aid. The leading men of the country then prevailed on Acting Executive Gomez to announce that Castro would not be permitted to return. Cipriano Castro had always likened himself to Napoleon, and surely when he attempted to return from Europe he received the international attention accorded only to the "Little Corporal." Napoleon was banished to St. Helena. Castro, baffled in his attempts to land on British or French possessions in the West Indies, was forced into exile on the Canaries. But where is he today?

This question is being asked in all parts of the world. No one seems able to answer. Every new rumor of his whereabouts receives headlines in the press. The report is current that he has managed, through a disguise, to reach the fastness of his former mountain home where he hopes again to rally the "Andinos" for battle with the Government forces. This rumor receives credence in the *cafés* of Caracas. Will the former President win the army to his standard of revolt? "*Quien sabe!*" (Who knows!) as they say down there.

President Gomez has shown wisdom in retaining powerful military chiefs in his Cabinet, among them Alcantara, a graduate of West Point, who was formerly his enemy. Matos, who led the unsuccessful revolution against Castro, is his Minister of Foreign Affairs. Gomez has already smoothed out many tangles. Venezuela has once

GENERAL JUAN VINCENTE GOMEZ,
PRESIDENT OF VENEZUELA.

more entered the circle of civilized nations from which Castro practically excommunicated her. The problems confronting the President are tremendous. Politically he was identified with the Castro ring and was the beneficiary of one of the most popular executive grafts—the cattle monopoly. He is untraveled and unread, but has considerable native shrewdness. Unquestionably he would not have been the popular choice for the presidency through election. What the country needs is peace, *peace* and "*a square deal*." We are told that "Everything comes to him who waits." "Here's hoping!" for the Venezuelans.

I stopped at the Hotel Klindt which faces the Plaza Bolivar, the main square of the city. An equestrian statue of the beloved Liberator (Bolivar) occupies the center of the plaza. There are some twelve or fourteen such attractive little parks in the city and in the center of nearly every one of them is a

costly statue of bronze or marble erected in honor of some popular hero or statesman.

There is a "Plaza Washington" with a statue of George Washington, who was a friend of the early Venezuelan patriots. Even the street urchins who play in this square know George Washington's history, but how many schoolboys in the States can tell you anything of Simon Bolívar? The Plaza Bolívar is the very heart of Caracas. It is paved with mosaic tiles and illuminated by festoons of electric lights. Here, on several evenings each week, there are concerts, the four military bands alternating. On the benches under its shade trees old dames gossip and politicians plot.

STATUE OF GEORGE WASHINGTON.
CARACAS, VENEZUELA.
(SIDE VIEW.)

There are a number of fine buildings in the city. The Federal capitol, erected in Guzman Blanco's day, is large and showy. In its stateroom are portraits of fierce old generals who fought in the battles for independence. Painted on the dome of this room is an immense panorama of the Battle of Carabobo, the decisive victory over the Spaniards. The President's town house is called "Mira Flores." Crespo and Castro lived there before him. His official residence is the "Casa Amarilla" (Yellow House) facing the Plaza Bolívar.

The Caraqueñians are music lovers and the city boasts a Grand Opera House, quite modern and pretentious for its population of 75,000. All classes manage somehow to attend the opera. The *cochero* who drove me about town whistled classic

airs. There are a National Theater, a National University, numerous modern Government buildings, many handsome churches, and a Pantheon, where immortal heroes lie in state—Bolivar's tomb in the place of honor, Miranda at his right.

There is a wonderful painting in the National Museum entitled "Miranda in Prison." It depicts the noble patriot, whom our Washington loved, in exile in Spain, where he died. It is from the brush of Arturo Michelena, Venezuela's great artist, who died at the tragically early age of thirty. Michelena's work has graced that artist's "Hall of Fame," the Paris Salon. At the time of his death, he was at work on his masterpiece, "The Last Supper," which now hangs, in an uncompleted state, in the Cathedral. Artists from many parts of the world have made a pilgrimage to this picture. Even unfinished, it is said to rank with, and perhaps surpass, any

VIEW OF CARACAS, THE CAPITAL OF VENEZUELA.

THE MUNICIPAL THEATER, CARACAS.

THE NATIONAL OPERA HOUSE, CARACAS

PUBLIC CARRIAGES AND "CABBIES," CARACAS.

A MARKET DAY IN CARACAS.

STATUE TO HEROES OF THE INDEPENDENCE,
CARACAS, VENEZUELA.

other conception of the subject. Michelena was born in Caracas, and another native of the capital, "Tito" Salao, now gives promise of artistic fame. Theresa Carreño, the noted pianist, is also a Venezuelan.

Because of its great natural beauty, Caracas would seem to be the rightful home of artists. There is not an inartistic touch in the town. The streets and sidewalks are narrow, in Spanish fashion, an electric car, a carriage and four pedestrians completely filling the space from wall to wall. The electric tramway is owned by British capital. The carriages are victorias, so popular throughout South America, and the 550 of

them in the city are of home manufacture. With many cement-paved streets, well-laid sidewalks and uniformly-built houses, freshly painted, the whole has a decidedly neat appearance. The practical American notes, however, that the sewerage system is not all it might be. Plans for sanitation are now under way.

The suburb of Paraiso is modern and most attractive. Here coquettish *chalets*, surrounded by luxurious gardens, line either side of wide, well-shaded streets. Here is the fine new Boule-

A VENEZUELAN COUNTRY HOUSE, NEAR PARAISO.

vard Paraiso built recently by President Gomez, where the Sunday afternoon *corso* is a social event. On this drive I met several automobiles. There are twenty in town and an automobile club is soon to be formed. The President owns two French motor cars, but is often seen in a victoria not unlike the other 549, a postilion alone announcing the coming of the Chief Executive

The Venezuelans are exceedingly fond of sport. On Sun-

BULL-FIGHT IN CARACAS.

day there are horse races at the Paraiso track and a bull-fight in town with toreadors from Spain. The President patronizes the cock-fight, so it is popular at present. In a village near the capital, I saw the native sport, *coleada*, where a bull was liberated in the main street. Horsemen, approaching at full speed, endeavored to throw the animal by giving its tail a dexterous twist. To throw the bull at the feet of his lady-fair was the great ambition of each contestant.

The small boys play baseball here in true American style. Many of them throng the streets from dawn till long after dark selling lottery tickets. The lottery is the most popular institution of the country. For the three weekly drawings, \$30,000 worth of tickets are issued, the Government receiving a ten per cent commission. Strange to say, there is still enough spare cash for another heavy play on the Royal Madrid Lottery of Spain.

From twelve until two o'clock, about everything in town closes. It is *siesta* time. The *mañana* (tomorrow) habit is here also. A funeral was passing and a Yankee in town turned to a bystander and asked who was dead.

"*Quien sabe!*" answered the native, with a shrug of the shoulders.

"So Quien Sabe is dead, is he?" said the American. "Well, I wish to Heaven Mañana would die, too!"

PATIO OF PRESIDENT'S OFFICIAL RESIDENCE, CARACAS.

CHAPTER XXXIX.

CURIOUS SIGHTS AND FACTS.

I DID not return to the coast via the La Guayra-Caracas Railway. I had heard so much of the trip from Caracas to Puerto Cabello by way of Valencia, that I decided to go that way. The two most important ports on the Caribbean are La Guayra and Puerto Cabello. From both of these cities railways pass to the interior, the one to Caracas, the other to Valencia. Between these two points, and connecting them, a third railway has been built, tapping a most productive district. This interior line, one hundred and twelve miles in length, is the road over which Germany and Venezuela had such a controversy some years ago, ending in the bombardment of Puerto Cabello by German warships.

Krupp, the famous gunmaker, secured a most favorable concession for the building of this road. The concession carried with it a Government guarantee of seven per cent on its securities. Naturally the Germans did not stint on the expense account. They made it an exhibition road in every particular. To secure a two per cent grade in this mountainous country, two hundred and twelve viaducts and bridges were constructed, one of the bridges being over three hundred and fifty feet in length. Then there are the tunnels, a whole flock of them (eighty-six to be exact), with a total length of three and a half miles. The station houses are models. In fact this "exhibit" shows about every product of German manufacture which it was possible to crowd in. It is "claimed by some" that they were intended as permanent exposition buildings.

Well, when the smoke had cleared away and the line was opened in 1894, after six years' work, \$15,000,000 had been spent—\$135,000 per mile for a single track line, putting it in the same class with the famous Oroya Road in Peru, which I described in my chapters on Peru. Since the road was prac-

ENTRANCE TO NATIONAL CAPITOL IN CARACAS, VENEZUELA

tically "made in Germany" (Venezuela supplying the site), the Kaiser sent the man-of-war *Stein* over that the officers might participate in the glorious opening festivities. Of course the road could not pay interest on such an investment. The Government was called upon to "settle up" for back interest. It demurred, claiming that altogether too much had been poured in. Finally Germany got both the money and the "exhibit." When I boarded the train at Caracas, I noted that this road is a different gauge from the La Guayra-Caracas Railway, so all goods have to be transshipped at the capital. Quite a handicap!

Both the ticket agent and the conductor asked me to write my name in their memorandum books. The same proceeding had been gone through when I came up to Caracas. I wondered why. Later I learned that a list of all passengers traveling by rail, steamer or canoe, within the jurisdiction of Venezuela, is published daily in the papers. It is easy, if you have time, to keep track of your friends—and your creditors. Another novel feature of travel here is the method by which people are protected against missing trains. All clocks at railway stations are set five minutes behind city time and as the trains follow railroad time, passengers have five minutes' grace to argue down the ever-exorbitant coachmen.

We pulled out of Caracas at seven-thirty in the morning, on a six-hour ride to Valencia. My ticket cost nine dollars—eight cents a mile. The ride up from La Guayra costs eleven cents a mile, so you can see that traveling is a luxury here. We climbed out of the Caracas Valley, surrounded by mountains 9,000 feet high, and followed the Guaire River into a well-cultivated country where sugar-cane, corn and a great variety of garden-truck are cultivated for the city market.

In an hour we reached Los Teques, the high point on the line, being 3,800 feet above sea level. Its delicious climate has made it a popular resort. The Venezuelans call it "the Switzerland of America." This is the famous coffee section. The quality of "Los Teques" brings a top price. Coffee is the great staple of the country. Over 200,000 acres are given over to its cultivation. The crop of 1910 was valued at over \$8,000,000, and the 1911 crop estimated at \$12,000,000. A wide stretch of country fulfils all conditions desired by the experienced

THE NATIONAL UNIVERSITY, CARACAS, VENEZUELA.

planter—altitudes from 2,000 to 8,000 feet; a dark, loamy soil, and frequent mists. A fair average crop is about 700 pounds to the acre and as prices at present are very good, a coffee estate, convenient to market, is the best investment in the country.

It is a picturesque sight on country roads—the long line of patient little burros laden with bags of coffee, their cargo protected by a covering of rawhide. As many as twenty of the little beasts are strung together in single file, their owner, decked in the popular brown plush hat, astride the leader. The burros run a real competition with the railroads, and in the great “unrailed” section have it all their own way. They sell as low as three dollars, but the *muy buenos* (very best) bring from eight to ten. Occasionally I saw ox-carts, the animals yoked by the horns in Spanish fashion, not by the more humane neck yoke as in Brazil.

From Los Teques we rolled down grade to Valencia through a magnificent country, bridging seventy-three chasms, with impressive views at every turn—mountains stacked chain on chain. Now there were occasional cacao estates. The annual crop of these chocolate beans is worth about \$3,500,000. The quality is excellent. Some chocolate manufacturers feature the name “Venezuela” in advertising their brands. Chocolate is served to perfection in the native hotels. I asked a waiter how they make it and it seems they allow it to come to a boil three times, then add a spoonful of powdered corn to make it smooth. It’s “smooth,” all right!

We stopped at La Victoria, where Castro had his favorite country place. He improved the old town, founded in 1593, with public buildings and large military barracks. There are sugar plantations here and vegetable gardens galore. I saw enough garlic and onions to feed all the Spaniards in the world! Not far from here Castro defeated the revolutionary forces led by Matos. The slaughter was terrific. A Venezuelan traveling with me said that he thought this battle the final lesson, that with it the scourge of lead-poisoning, in this frightful form, passed from the land. God grant it!

We came to the famous plantation—Ingenio Bolívar—where Ricaurte gave his life in the cause of independence. In

1911, during her centenary celebration, the republic unveiled a statue here in memory of this hero. Ricaurte's story should be featured in our school books. He and his followers were surrounded by thousands of Spaniards. They took refuge in a sugar house where a stack of powder was stored. Realizing that resistance was useless, Ricaurte commanded his companions to make their escape under cover of darkness. When a regiment attacked the building at dawn, he discharged his revolver into a barrel of powder, giving his own life to kill hundreds of the enemy—one of the noblest acts in history!

Back from the railroad I saw much uncultivated land, only awaiting settlers to bloom forth with a great variety of products. The average density of the population here is less than seven per square mile. In the States it is over thirty; in the Republic of Salvador, two hundred and forty. Room for all comers here!

At Cagua I saw a giant *samán* tree measuring thirty-five feet in circumference. Its historic branches sheltered such illustrious men as Bolívar and Humboldt. Cagua is important as the connecting point for the car roads and trails from the

A NATIVE WHERE THE POPULATION IS ONLY SEVEN PER
SQUARE MILE.

llanos, or grazing lands, back in the interior. All the cattle are driven here for shipment.

From the earliest days of Spanish conquest Venezuela has been famed as a cattle land. At the time of their War of Independence it was estimated that there were 3,000,000 head of cattle in the country. The industry has never since been as flourishing. The natural grazing lands comprise about 170,000,000 acres. In the past, this industry has been greatly handicapped by Government restriction, monopoly and taxation. Under favorable conditions the *llanos* should produce cattle ready for slaughter at a cost not to exceed \$2.50 a head.

Three years ago an English company secured a twenty-five-year concession, free from taxation, for shipping refrigerated meat. An old brewery at Puerto Cabello was remodeled for the purpose and the Royal Mail steamers have been carrying the product to England. The present plant has a capacity of 3,000 beeves a month, but has not reached this figure because of a scarcity of cattle. Recently a policy of expansion was adopted, and the company has brought out experienced Scotch breeders and high-class stock, is sinking wells to supply the cattle with water during the dry season (May to October), and sowing extensive pasture lands with alfalfa. Although refrigeration is monopolized by this one company and live

export by President Gomez, the industry should reach giant proportions within a few years. We can look to Venezuela to supply a good share of the beefsteaks of the future to the hungry of the world. Last year \$1,000,000 worth of hides were exported and \$170,000 worth of horns.

We stopped for a few moments at Maracay, interesting as the home of President Gomez, who spends much time here in his big white house, the real "White House" of the country. Many important men have built homes here, and the sleepy little town has become a dot on the map. From here on to Valencia is the most populous portion of the country, the very heart of the agricultural section. We skirted a blue expanse of water, and I recalled the strange lake of which I had read—Lake Valencia, which the natives call Tacarigua. It not only changes its level mysteriously, but has in the past changed an outlet into an inlet and a tributary into an outlet. It seems encircled by mountains, yet its two western outlets at times flow in opposite directions—one to the Caribbean and the other to the Orinoco. The brackish water contains few fish, but I saw an army of alligators which I'm told are not alligators, at all, but Old World crocodiles. The lake is twenty miles long, twelve miles wide and has over twenty verdant islands. Little steamers navigate it.

Six miles from the lake is the city of Valencia with 40,000 people, the old capital of the republic. And oh! but they are jealous of Caracas! We were here only thirty minutes as we changed cars to the English line for Puerto Cabello—fare, \$2.50; distance, thirty-four miles. This part of the trip was uninteresting, but I was so fortunate as to pick up acquaintance with a fellow passenger, an Englishman who has lived twelve years in the country and traveled all over it. He said that everything was suffering from the drought, thousands of goats being dead in the Coro section, just to the west. The raising of goats, it seems, is an important industry over there, and they sent out \$400,000 worth of skins last year. He thought that Castro's scheme of assisting industries by placing prohibitive duties on certain foreign articles had worked out all right—shoes, for instance. They are all made in the country now, factories being everywhere. Native hides and leathers, home

tanned, are utilized. He said the shoes were well made—wore them himself.

While we chatted he handed me a cigar made in the country. I was surprised at its quality. The tobacco was grown near Puerto Cabello, and an even better leaf comes from Coro and other points. This cigar sells for five cents, and the local-grown filler and wrapper compare favorably with the Porto Rican. There is much unimproved land in the country favorable to tobacco cultivation, but only \$40,000 worth of leaf was exported last year. The making of cigarettes is now the monopoly of a large national company. Formerly a lot of little factories were scattered about, employing 15,000 people. Castro closed them up, which caused a merry row and made him more enemies than any other one act. Every man and boy here smokes cigarettes. It took \$70,000 worth of imported rice paper last year to roll the first-class ones.

"Any chewing tobacco used here?" I asked the Britisher.

"Yes, there are several factories kept busy turning it out. The Indians over in the State of Mérida make their own chewing tobacco by boiling the leaf into a paste."

"Any fiber plants here?"

"Yes, an American brought down a machine not long ago to prepare fiber for market. He's over in the Coro district, but I hear he's stuck for want of water for the boiler. The drought is playing havoc over there."

My companion seemed to think the outlook fairly bright for the country, but "The present Government is patterned much after the last," he said. "There's little change in operation. There is no freedom of the press; the papers being filled with laudatory notices of the Government and of people in power. When the President's term of office expires, he'll appoint his Minister of Finance, Antonio Pimentel, to take his place for four years until he can take hold again."

We had now reached Puerto Cabello. The place owes its importance to its harbor, "one of the finest in the world," if you can rely on what the natives say. The old Spaniards named it Cabello (hair), meaning that, in its placid waters, the ship could be held by a hair. They built a fort on the point to resist the pirates. Today the fort, remodeled, has eight-

SCENE ON MARKET DAY, MARACAIBO, VENEZUELA.

inch Creusot guns which Castro bought. He made this a creditable port of entry by dredging the harbor and building docks, wharves, a navy yard and a modern dry dock.

I had heard of the "Hotel of the Baths" in Puerto Cabello and had a vision of a real bathtub and maybe hot water! The moth-eaten old building on the shore did not look promising.

"I want room and bath," I announced in my best Spanish.

"*Si, señor, perfectamente.*"

The bath was there, all right. It was right by the bed. It was, in fact, twice as large as the bedroom itself, a bit of the sea reached from it by a flight of stone steps and walled off from the next fellow's bathroom. The surf beat into my room all night. It was a case of being "Rocked in the Cradle of the Deep."

I could not resist taking a trip over to Maracaibo, the important city at the western end of Venezuela. I boarded the little steamer, *Manzannares*, of only 1,500 tons, at Puerto Cabello, and we made the run over in a little under twelve hours. The steamer belongs to a new company (Venezuelan) that paid twenty-eight per cent dividends in 1911. Formerly the only way to reach Maracaibo was via the Dutch island of Curaçao. The town, which has about 40,000 inhabitants, is situated just inside the great marine inlet known as Lake Maracaibo, the largest gulf of this part of the world. It is one hundred and fifty miles long and sixty miles wide, with depth sufficient to float the largest ocean steamers. The entrance, however, is so obstructed by sandbars that only light-draft vessels can enter, so commerce is mostly carried on by little "tubs" which transship their cargo at Curaçao.

A steamer of the "Red D" line, flying the American flag, was at the dock when we arrived. It was loading a full cargo of coffee. Besides being the natural port for a vast and productive region in western Venezuela, Maracaibo is also the most available outlet for a large portion of eastern Colombia, so probably half of the coffee known in our markets as "Maracaibo" is really a Colombian product. Immense bales of deer-skin were being loaded on the boat, and I found that deer abound in the country back of the lake—\$60,000 worth being shipped out in 1911. Good country for the sportsman!

Maracaibo has a bad name abroad. One writer calls it "the graveyard of earthly hopes and fears." There is fever here, and with an average temperature of eighty in an ever-humid land, we may well call it "a hot town." A former American consul "held the job" here for thirty years. The story is told that his successor was appointed and became his guest on arriving. Discovering a nice metallic coffin in the closet of his bedroom, the new arrival inquired regarding it next morning. The consul was profuse in his apologies, and explained that the fever season was just setting in and it was the custom to be ready for emergencies. The new appointee took the next boat back to New York.

In looking over a Maracaibo paper, I saw that every article received by merchants through the custom house was listed. All over the country dailies publish such lists, it seems. No chance here of advertising "A Brand New Stock of Parasols" unless you can "deliver the goods."

Maracaibo, like La Guayra, has its leper hospital, and here they are planning an extension!

There are immense deposits of asphalt near the lake and an American company spent considerable money preparing to develop the industry, under the impression that its concession permitted it to ship out without export duty. The company tried it, but it did not "go." Then Critchfield, one of the owners, got our State Department to intervene. Finally the Government bought out the company.

From Maracaibo I sailed for a thousand miles to the east along the Venezuelan coast, stopping at Margarita, the famous pearl island. These pearl fisheries date back to pre-Columbian times. The Indian women seen by the first explorers were adorned with necklaces and bracelets of pearls. At the island of Cubagua, near Margarita, they found the fisheries in operation. Here, on the almost submerged isle, they founded one of the first colonies of the New World. Sheds were erected, wood and water brought from the mainland, and the natives put to work in earnest bringing up the pearl oysters. Here a city rose with costly churches—a city built on pearls.

In 1527 Charles V. granted it a royal charter, New Cadiz it was called. The poor Indians, who had been so ready to

PORT OF PAMPATAR, PEARL ISLAND OF MARGARITA, OFF THE COAST OF VENEZUELA. THE LITTLE VESSELS ARE USED BY THE PEARL FISHERS.

assist the strange newcomers, were reduced to slavery. New Cadiz was the mart not only for pearls, but for human beings. After fifty years of infamous prosperity, a hurricane one day swept Cubagua. The island was submerged, to reappear in its primitive state.

Margarita had better luck. Up to a few years ago two thousand men found employment here in the pearl trade and the annual output was valued at \$900,000 a year. The methods were so primitive that immense numbers of oysters were sacrificed. In 1911 the export fell to \$80,000. A French company has now secured the exclusive concession, giving the Government ten per cent royalty, and is introducing modern diving apparatus, displacing the heavy metallic scoops dragged on the bottom of the sea and drawn to the surface by a clumsy hand windlass. I found the natives of the island busily engaged in fishing for redsnappers and Spanish mackerel—quite a come down from pearls!

My next stop was 'way around in the Orinoco delta, where our little vessel docked at the village of Guanaco, the shipping point of the asphalt from the famous Venezuelan Pitch Lake. I hopped aboard the little narrow-gauge train for a trip out to the lake while my ship unloaded her cargo. For five miles the little toy rails zigzagged their uneven way through the jungle. At the end, the strange lake appeared as a plain between low swamps and foothills. It covers over 1,000 acres and from it is taken 25,000 tons of asphalt annually for shipment to the United States. Negroes are employed in the mining, which consists of loosening up the pitch with picks and dumping it into the endless chain of carriers which bring it to the big vats for boiling. The boiling frees it from foreign matter. On reaching its destination in the States, the pitch is again "mined" with picks from the steamer's hold.

I have called the deposit at Guanaco "the Pitch Lake," but it is really more of a swamp, short grass and clumps of ferns alternating with the pitch bubbles. I walked over a portion of it, but in some places my feet sank when I lingered. It was better to keep on the move. At one end of the swamp is "the Mother of the Lake," where the matter is always soft and where no vegetation grows. There is one oasis called "Parrot

LOADING ASPHALT ON TRAINS, ORINOCO DELTA, VENEZUELA.

Island," guarded on all sides by quaking pitch, where hundreds of green "pollies" roost at night, flying off to the feeding grounds at dawn.

The New York and Bermudez Company, which works this deposit, has built a modern plant with comfortable quarters for its employés. The manager is of the opinion that asphaltum, made from our mineral oils in the States, will not interfere with the sale of the Venezuelan product, which is of a different quality. Its most common use is for paving, but it is also used for roofing, waterproofing, making varnish, covering electric cables, lining cold-storage plants, corking wooden ships, and in the manufacture of shoe blacking.

The Caribbean Oil Company, a relative of the New York and Bermudez Company, has recently secured a concession to drill for oil on 200,000 square miles of Venezuelan territory. A crew of expert drillers had just arrived at Guanaco at the time of my visit. Large quantities of oil are now being shipped from the Island of Trinidad, just across the Gulf of Paria, where there is also a Pitch Lake, so I see no reason why the Guanaco and Maracaibo fields should not become heavy producers. It was the new company's intention to deliver oil in tank steamers to La Guayra and pump it up to Caracas where fuel is exceedingly high. Coal costs fifteen dollars a ton there, almost valuable enough to use for jewelry!

I became so interested in this part of the country that I decided to voyage up the Orinoco River. The Orinoco is one of the great rivers of the world, exceeded only in volume in the New World by the Amazon, La Plata, Mississippi and St. Lawrence. It ranks ninth among world rivers. Its headwaters are away up on the Brazilian border and many of its tributaries rise in the Colombian highlands. It is navigable for stern wheelers to Ciudad Bolívar, 260 miles from the sea, at all seasons of the year, small vessels going far beyond this point. If the bar at one of the thirty-six mouths of the river could be dredged, a barrier of rocks up the river removed, and the maximum depth of fifteen feet made thirty, a great future would be insured for the four thousand miles of river and tributaries. Free navigation of the stream would, of course, be necessary.

Now there are few steamers on the Orinoco, all operated by a Venezuelan company.

The delta is a weird maze of waters. Even the Warrau Indian in his "dugout" canoe sometimes is lost in the wilderness of its crisscross channels. The great river, sweeping along like a millrace, is filling the Gulf of Paria with mud. The delta islands are not very habitable, but perhaps the time will come when they will form tracts of fertile land. Indians alone can live in these mosquito swamps. They probably owe their lives to the fact that no one has ever cared to evict them from their wilderness.

Little but bird life is seen in these channels, among them

ON A SHORE OF THE ORINOCO RIVER.

being the snowy white heron, (the egret of commerce); the flame-colored ibis, and the macaws of brilliant plumage. Farther up the river on the mainland there are monkeys of all kinds, among them the terrific red howler, which wakens the forest with its roar.

"Any sloths or porcupines?" I asked the captain.

"Why, the woods are full of 'em. But they're such a tame lot, catching them is about as much sport as picking blackberries!"

The jaguar, the South American "tiger" (really a leopard), roams through this forest, hunting the poor, harmless tapir, the largest but perhaps the gentlest of the wild kindred. Coiled

INDIANS OF THE UPPER ORINOCO RIVER,
VENEZUELA.

in the branches, overhanging the river, are snakes—black, spotted and yellow fellows—and I saw one water boa, fourteen feet long. The mate “landed” it with a rifle. Alligators by the thousands; turtles of great size and electric eels, carrying storage batteries with them strong enough to discourage river bathing, also appear in this “Natural History Collection.” For real excitement there are the Caribe fish! They swim in schools, armed with three rows of saw-like teeth, attacking fish, animal or man that may come their way.

To the left, going up stream, is the Venezuelan Guiana, that El Dorado which has lured so many men to their doom. The

Spanish, Dutch, French and British all sought and fought for gold here in long-ago days. Even in our own time, this section has been under controversy. England claimed her right to it on the ground of history, exploration and occupation. (Mostly "occupation" since she had been slowly shifting her colonial border.) Venezuela's claim rested on old Spanish maps. It meant the control of the Orinoco, and Venezuela won. This section of the republic is little known, yet a few of its mines are famous—El Callao, for instance, which produced over \$12,000,000 before its vein was lost. These mineral lands have a great future.

We stopped at Imataca, fifty miles up the river. This is one of the great iron deposits of the globe. There had been a great scramble for its possession and the Pierson group of Canadian capitalists had secured it. The company was planning gigantic development. There were over 200,000 tons of seventy-five per cent pure magnetic Bessemer ore exposed in one outcrop, and I hardly dare print the expert's figures of the ore held in reserve. Shipment to the States had already begun. Electric power was to be used in all the mining operations.

Our little steamer had to make frequent stops to take on firewood from measured piles stacked on shore. I saw banana plantations at some of these wood stations and also the inevitable manioc from which the native cassava bread is made. There was an occasional patch of sugar-cane. The method of extracting the juice is primitive—an ox mill equipped with wooden rollers. Boiling the juice seems to be the beginning and end of the sugar manufacture. The Government is assisting this industry by prohibiting the importation of sugar.

These river folk use the Orinoco as their only highway and regard Caracas as the great distant metropolis. Their geography is hazy beyond the capital. This whole fertile country is sparsely populated. There are no cities, merely hamlets, until Ciudad Bolívar is reached. The shores of the great river lack people and capital.

Ciudad Bolívar is the fifth city of Venezuela, its population being 14,000. Originally it was a Spanish town called Santo Thomé; later it was called Angostura, meaning the Narrows, for at this point the river is confined in a deep channel. In

HOUSE WHERE GENERAL SIMON BOLIVAR, THE LIBERATOR, LIVED
IN CIUDAD BOLIVAR, VENEZUELA.

1846 the name was changed to Ciudad Bolívar—city of Bolívar. It was here that the famous "Congress of Angostura" was held in 1813 when Bolívar formed his "Great Republic of Colombia."

The well known bitters—"Angostura," an important ingredient in the American cocktail—were formerly made here. (The factory has been moved to Port of Spain, Trinidad.) The herbs used are found in the Orinoco forest. It is the one Venezuelan product "on which the sun never sets." Two important exports of Ciudad Bolívar are balata and tonka beans. Few Americans have heard of either.

Balata is a near relative of rubber. It is used principally in automobile tires. Last year \$2,000,000 worth of balata was shipped from the Orinoco, besides \$900,000 of pure "Pará" rubber. But much of the Venezuelan rubber gathered near the Brazilian border reaches its market via Brazil through the Cassiquiare, that strange natural canal which connects the Orinoco and Amazon River systems. The balata gatherers are criminally careless, felling, rather than tapping, the trees. In

this way many valuable trees are left to rot, for the balata, besides yielding gum, is a fine timber tree.

For many years it was understood that the half-million dollars' worth of tonka beans shipped annually to the United States were used, in a pulverized form, in snuff and tobacco to give them "bouquet." It was also known that soap and perfumery manufacturers made use of the fragrant beans. But it took Dr. Wiley's Pure Food Law to expose the fact that Tonka had been masquerading as "Pure Vanilla Extract." Now you will notice that your vanilla label reads, "Extract of Vanilla and Tonka Bean." These beans are the dried seeds of a fruit tree native to northern South America. The first specimen was supposed to have reached Europe from Tonka in French Cochin China, hence the name.

There are in this beautiful and bountiful country many things of interest that I have not been able to mention for want of space. Like many of the South American countries, a volume might be written about Venezuela's political history alone. From its earliest years it has been swayed and shaken by revolutions, but as time goes on the convulsions are less frequent and less violent. Without question it will ultimately become a great and prosperous nation with a well-organized and stable Government. May this be her happy lot!

COLOMBIA

Area, 435,000 square miles, or about the area of the States of New York, Ohio, Texas, Alabama and South Carolina combined—Coast line about 1,300 miles, both upon the Atlantic and the Pacific Oceans—Chief natural resources, coffee, rubber, sugar, cacao, tobacco, valuable woods, vegetable ivory, Panama hats, salt, pelts, cattle, orchids, gold, silver, platinum, copper, coal, petroleum, marble, fruits, precious stones—Total exports and imports in 1911, \$34,000,000—Exports to the United States, 1911, \$8,994,460; imports from the United States, \$4,905,934—Standing army, 7,000—Navy, 11 ships—Capital, Bogotá, population, 130,000—Total population of Colombia, 4,500,000.

CHAPTER XL.

HOME OF ALLIGATORS AND ORCHIDS.

IT IS to be regretted that Colombia did not retain her old name of "New Granada" given her by Jimenez de Quesada in remembrance of his birthplace in Andalusia, Spain. Now, with British Columbia, "Hail Columbia," "Columbia, Gem of the Ocean," and a few others, this belated attempt to stamp the discoverer's name on some portion of terra firma is a bit confusing. The South American republic, "United States of Colombia," is spelled with an "o" from "Colon," while all the others are derived from the English version of the great Admiral's name—"Columbus."

At present writing and for some time past, the United States of Colombia has been giving the United States of America "Hail Columbia" over the Panama Canal question. From the grandstand, the plays were as follows: Uncle Sam wanted the chance to complete the canal begun and abandoned by the French. Colombia owned the land. The trade was on! Representatives of the two countries agreed on terms and conditions and the proceeding was moving fairly smooth, when—"Bang!" Colombia's Congress rejected the whole transaction! Panama, naturally desirous that Uncle Sam begin spending money on the

great ditch, talked of quitting Mother Colombia and setting up housekeeping for herself.

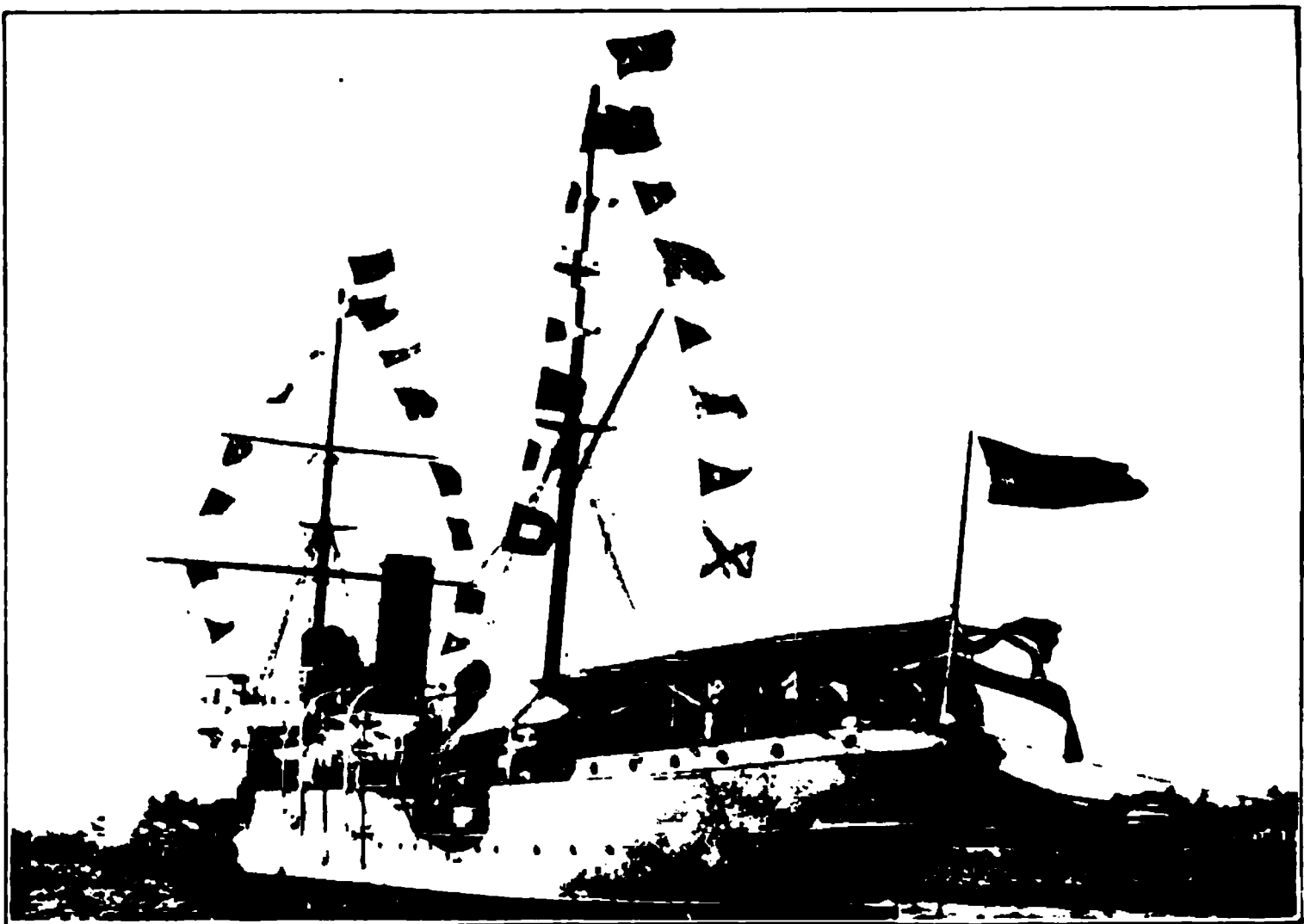
Of course Colombia had an army large enough to prevent any such occurrence, but the wise men up in Bogotá assured the people that Uncle Sam, recalling the cause of his own Civil War, would spank the rebellious child and send her back home. Panama announced her independence, and Uncle Sam called, as scheduled; but, instead of acting "true to label," told the rebellious one to remain just where she was, and announced that Mother Colombia was to leave her alone. When the people of Colombia "got the message," they started out with *machetes* after the wise men! Said wise men "took to the tall timber"—otherwise scattered themselves over the capitals of Europe. Result—Panama remained a republic and Uncle Sam is digging the ditch.

Although the Colombian Government, officially, has calmed down a bit since 1903, and sent a diplomatic representative to Washington, with the hope of having the whole matter placed before The Hague Tribunal, the masses are still unreconciled. It was the fear of an uprising which prevented Colombia from

THE PIER AT PUERTO COLOMBIA, OCEAN PORT OF BARRANQUILLA,
EIGHTEEN MILES DISTANT.

sending an urgent invitation to Secretary of State Knox to visit the country in the spring of 1912. It is rumored that Uncle Sam has hinted that he may buy a Colombian island, suitable as a coaling station, paying a most satisfactory price for it. But Colombia refuses the balm in this form, still includes Panama in her list of States and keeps up an incessant cry for adjustment at The Hague.

Undoubtedly the benefit of the canal to Colombia will be



COLOMBIAN MAN-OF-WAR "CARTAGENA," FORMERLY PRIVATE YACHT OF THE SULTAN OF MOROCCO.

enormous. She has a long coast on the Pacific and on the Caribbean, about 1,300 miles on each coast. She is as large as France, Germany and Belgium combined, but sparsely inhabited, having only 4,500,000 people. She is rich in natural resources, especially in minerals. The completion of the canal will bring the shipping of the world in sight of her shores and development will surely follow.

The front door of the country, Puerto Colombia, looks like

the back yard! This Caribbean port, known of old as Sabanilla, is in the delta of the Magdalena River. It consists of a tremendously long pier, which cost \$300,000, and a desolate, wind-swept little village. From here there is an hour's train ride, through an uninteresting country, to Barranquilla, metropolis of the Lower Magdalena. A roundabout, but far more attractive way of reaching Barranquilla, is via the Caribbean port of Santa Marta, east of Puerto Colombia. Santa Marta is a picturesque little place and one of the oldest settlements on the Spanish Main, having been founded in 1525. Its harbor is one of the safest on the Caribbean, but rather contracted in area. Behind the town the hills terrace up to the snowy "Sierra Nevada de Santa Marta," which towers nearly 17,000 feet above sea level.

The nature of the country here varies with the season. During the months of rain, it is semi-tropical; in the dry season, semi-arid. The trade of Santa Marta is largely due to the United Fruit Company, whose banana plantations extend for miles beyond the town. An English company has built a ninety-mile railway into the interior, enabling the crop of bananas to reach the steamer's hold. The fruit is raised with irrigation and is of very good quality, although the drought of 1911-12 demonstrated that moisture in the air is necessary for the production of prime stock; simply "bathing the feet" will not suffice. The annual banana crop of this region has already passed the million-dollar mark and is still going up.

To reach Barranquilla from Santa Marta, I rode out on the "Banana Railway" for twenty-five miles to the town of Cienaga, which has a larger population than Santa Marta, as it is the home of many of the employés on the plantations and the railroad. It was hard to believe that this thatched settlement boasted of 25,000 inhabitants. Here at nightfall I boarded a rickety little steamer for the voyage through the *caños* of the Magdalena delta. The craft was two-decked, stern-wheeled, slab-sided and wheezy—the type used on the Mississippi in "the good old steamboat days." The lower deck was filled with wood for fuel, the supply to be replenished during the voyage. A motley assembly of passengers crowded the upper deck, mostly negroes. I was given the only cabin, which rightfully

NATIVES IN DUGOUT SEEN IN THE SHADOWS OF THE SHORE AS
WE PASSED.

belonged to the captain (a white man from Jamaica) whose old father occupied the proud position of purser.

We were late in starting and crossed the wide lagoon of Cienaga Grande by moonlight, only to stick fast on a mud bank on the other side. Due to reach the Magdalena and Barranquilla early next morning, I wakened to find that we were still in the *caños*. For hours we wound through these narrow, shallow streams with a forest of mangroves on either side. Natives now and then, poling their laden canoes, water fowl and alligators, alone broke the monotony of the shores. The killing of alligators for their skins has become an important industry in this part of Colombia. An American firm in Newark, N. J., which practically controls the world's market, took 30,000 Colombian skins last year. A new use for the leather has been found in the upholstering of automobile and carriage seats and the resulting demand may be enormous.

At present the Colombian skins come from not over three hundred miles of *caños* and lagoons on the Lower Magdalena, and as it is estimated that there are over four thousand miles of the "alligator-bearing streams" in the country, the industry

is capable of almost unlimited expansion; nor is there a possibility of an early extinction of the reptiles, as every full-grown female lays over one hundred eggs yearly. From 1905 to 1910, an exclusive concession was granted to an American who established over twenty gathering stations. Since 1911 the "profession" has been open to all comers, and it is expected that the production will soon reach 100,000 skins per year.

While there are a number of varieties of alligator in Colombian waters, only two possess skins of commercial value. Among those "rejected for cause" is the needle-snouted fellow, of which many specimens, over twenty-four feet long and six feet in diameter, have been found. These large hides tan admirably, but, unfortunately, they have a pip mark in the center of each scale which is considered a flaw, preventing their reincarnation into suitcases. They are occasionally bought, once in a while, as curiosities. As alligator leather fetches a comparatively high price, the tanners pay \$1.50 for a skin from seven to ten feet long. It must be "green salted" as stiff, sun-dried skins are worthless.

The army in Colomb

A DEFUNCT RESIDENT OF THE
DELTA.

NA

has the monopoly of the use of rifles, so the alligator hunters are forced to adopt other methods. During the high-water season the reptiles rush on to the inundated flats, preying on ascending fish. As the waters lower, they crowd back through the connecting channels and the hunters, in their turn, play havoc with the alligators. Riding on the end of a long, narrow canoe, with uplifted harpoon, the clever, agile hunter is wheeled about by his no less expert mate in the stern, and woe to the hapless 'gator chancing to rise within thirty feet of the spearman, for his doom is sealed. Often the hunter will not

SCENE ON THE LOWER MAGDALENA RIVER.

wait for his prey to come to the surface, but, guided by a streak of bubbles from the breathing animal, will send his spear flying with deadly aim, and a large specimen will be hauled to the bank to be stunned by a blow from an ax. When the flats are drained at low water, hundreds of alligators remain stuck in the slime over which their short paws cannot drag their heavy bodies. It is then that hunters make "record catches."

In the main rivers, the reptiles are not molested, save by an

occasional pistol shot from a passing steamer, for the swift current and deep water holes afford them easy means of escape. Every ounce of an alligator may be turned into a marketable product. The scrapings from the valuable hide can be utilized in making glue. The teeth, a perfectly white ivory of medium hardness, are easily worked into an endless variety of small articles, such as thimbles, buttons and cigar holders. The grease, which constitutes a large percentage of the body, produces a clear light yellow oil, resembling cod liver oil, and is widely used by the natives for pulmonary diseases.

The white, and seemingly palatable, flesh is not eaten by the natives, although they relish the eggs. There is no doubt, however, but that the former could be suitably prepared for human and animal food. The bones could be used as a fertilizer and the musk-secreting glands are certainly of value. The popular belief that the parent alligators devour their young has no foundation. It probably originated from the fact that the solicitous mother helps the newly born 'gator to swim by opening her mouth and allowing the little one to use the lower jaw as a diving stand. There is no more ferocious creature in defense of its young than the female alligator.

We came through the last of the *caños* at noon and reached the wide, muddy Magdalena, the great Colombian highway,

**"TWISTING THE BULL'S TAIL," AN AMATEUR BULL-FIGHT IN
BARRANQUILLA, COLOMBIA. SUCH BULL-FIGHTS ARE
HELD DURING THE CARNIVAL SEASON.**

which affords practically the only means of transportation to the north. Across the river lay Barranquilla, the most important town, commercially, of the republic.

Barranquilla lies fifteen miles from the bar which prevents access from the ocean to the river, and this want of direct communication is supplied by eighteen miles of rail to the pier at Puerto Colombia. The bar at the mouth of the Magdalena has been formed by the sea precipitating the mud held in solution in the river water, and this choking has been artificially assisted by revolutionists. Today only shallow-draft sailing vessels can enter the river, but the Government has extensive plans for dredging and the construction of jetties similar to those at the delta of the Mississippi. Money for the actual work is not as yet forthcoming.

Barranquilla is an ugly, colorless town built on the sands. It is modern, with no historical associations. The streets are

wide, but unpaved, and often inches deep in sand, which, with the ever-prevalent wind, makes walking or driving most disagreeable. The *quintas*, or villas, on the higher land back of the town, form the only attractive feature. Here the merchants, many of them Germans, have their homes.

On the busy water-front I found "a flock of river boats," all built on the same pattern—double-decked, wood-burning, paddle-wheeled affairs, over half of them made in Wilmington,

PARADE CALLED "THE BATTLE OF THE FLOWERS," DURING
CARNIVAL SEASON, BARRANQUILLA, COLOMBIA.

Del. They navigate the Magdalena, the Cauca and the Nichi Rivers.

Last year Barranquilla handled just fifty per cent of the total trade of \$34,000,000, with the other nine ports of entry trailing behind. Still, she is having her troubles, as the bay at Puerto Colombia is fast filling with silt, and unless dredging begins within a few years, a good portion of her trade may be

A PART OF THE OLD WALL, SURROUNDING CARTAGENA, COLOMBIA.

diverted to Cartagena. Cartagena is next in importance to Barranquilla, commercially, and is reached from Puerto Colombia by ocean steamer in five or six hours, or by sixty-five miles of river travel to the village of Calamar, where connection is made with the Cartagena-Magdalena Railway for another sixty-five miles.

CHURCH OF SAN PEDRO DE CLAVER, ONE OF THE OLDEST ON THE
CONTINENT, CARTAGENA, COLOMBIA.

The fine land-locked harbor of Cartagena is enormously superior to Puerto Colombia's open roadstead, and attempts have been made to restore to the city its ancient prosperity. The American capitalists who built the Cartagena-Magdalena

Railway gave up the fight and turned the road over to an English company, which in turn has called in Colombian management in the hope of developing business. It is not, however, as a commercial port, present or future, that the traveler regards Cartagena; rather as a relic of Colonial days, it being the most perfectly preserved of the walled cities of the sixteenth century to be found in the New World. For more than three centuries its walls have stood, unbroken, its ancient arched portals still forming the only entrance, although a railway is just outside its gates.

Within the walls, the narrow, balcony-hung streets still wear a medieval air, and one recalls the days of Spanish

A SUBURB OF CARTAGENA, COLOMBIA. THE GREAT BUILDING ON
THE HILL WAS ONCE A SPANISH FORT. IT IS
NOW A CONVENT.

supremacy in South America, when spurred officers and commanders of galleons clanked noisily down these thoroughfares. Cartagena's splendid harbor was then the haven for Spain's famous treasure ships, and to guard this treasure, awaiting the arrival of the galleons, walls and forts costing \$30,000,000 were erected, the walls, in many places, forty feet thick. Probably no other port in America has witnessed such desperate fighting so persistently continued. It was attacked by the French, by the English under Drake, and later under Vernon. Lawrence Washington, brother of George Washington, was with Admiral Vernon in the siege of Cartagena. It was in honor of the Admiral that our "Mount Vernon" was named.

It was repeatedly attacked by pirates and indeed, for years, was in a state of continuous siege. Eight years ago, during a civil war, it was besieged, and for the first time met modern cannon directed from a man-of-war, but the great walls were unshaken and the quaint old city still stands, undisturbed.

PRISON AT CARTAGENA, COLOMBIA, WHICH
WAS FORMERLY THE CHURCH
OF SAN JOSE.

CHAPTER XLI.

EXPLORING THE INTERIOR.

I HAD occasion to send a wire to Bogotá while in Cartagena and found that the Government operates all lines, the rate being one cent a word for the first ten words to any part of the country. But the eleventh word is two cents, the twelfth three, and so on! It seems that the low rate per word caused merchants to send regular lettergrams, monopolizing the wires, so the Government applied just the reverse action to our American methods.

Paper money has practically displaced gold and silver in Colombia. For a twenty-dollar gold-piece I received a bale of dirty paper bills large enough to stuff a lounge. These *peso* bills were worth par one dollar gold in 1874, exchange advancing until it reached the high water mark, 189 *pesos* to one dollar gold in 1902. Since then exchange has fallen, and today the Colombian dollar bill is worth a little less than a cent in our money.

A story is told of an American prospector, just landed in the country, who admired a spirited horse and offered the owner three hundred dollars for it.

"No, *señor!* Impossible!" answered the Colombian. "I paid five hundred dollars yesterday to have him shod!"

I had brought a saddle with me, expecting, of course, to use it before reaching the capital of Colombia, so far distant from the coast. Instead, I learned that the entire journey can be made by train and steamer. From Cartagena I returned by rail to the Magdalena River, passing the famous "Dique"—half canal, half river—which connects the Magdalena with the sea near Cartagena. This canal was originally opened by Philip II. of Spain, and was in use until the beginning of the nineteenth century, when it choked with silt and remained closed until thirty years ago, when it was again reopened for sailing craft.

At Calamar, I boarded a typical "Lower River" boat and started up river to La Dorada, 480 miles to the north. Here I changed to a railway around the rapids. Then another transfer to an "Upper River" steamer, ninety-three miles to Girardot, where I took a train for Bogotá, 109 miles across the plateau. I had been assured in Calamar that I would reach Bogotá in nine days, but delays, caused by low water, were numerous, and by the time we had struggled clear of the last mud bank at Girardot, eighteen days had lapsed!

CAMBOA ON THE UPPER MAGDALENA RIVER.

Eighteen fairly exciting days, for we carried a stock of dynamite as part of our cargo, and with frequent collisions with shoals and sunken trees, were often in danger of being "blown to kingdom come." The steamers left much to be desired—not overly clean and with impossible food; but, in spite of its drawbacks, the man who has made up his mind not to look for luxury will recall this journey with pleasure, from the tropics and sea level to ever-perpetual spring, 9,000 feet higher.

The Lower River is not especially interesting, but beyond

the rapids the Upper River scenery becomes impressive, there being magnificent forests teeming with vegetable and animal life. Here we found a new type of river craft, the *champan*, much in use by the natives, requiring from fifteen to eighteen men to punt it against the current. I was reminded of the galleys of old! A semi-circular roof of bamboo at one end affords protection from sun and rain. These picturesque boats are sometimes called into use when a steamer strands on a sand bank, but, at best, they are far from comfortable.

NATIVES AND HUT ON THE UPPER MAGDALENA RIVER.

Among my fellow passengers were several officers of the Colombian army, looking very smart and, of course, traveling first-class. The troop of soldiers as "deckers" down below was rather a woe-begone lot. It was not kind of me to recall the story of a Colombian revolution and the enlisting officer who sent the following note to his superior:

"Dear and Honored Colonel: By this boat I am sending you forty volunteers. Please return the ropes!"

The standing army numbers 7,000, and the Government keeps the men in good physical training by putting them at work repairing roads. We had a number of foreigners on board. Three naturalists from the American Museum of Natural History in New York left the boat halfway up river to start on a six months' trip collecting and studying the strange animal life of the jungle. There was an artist in the party and, assisted by his sketches, they planned to reproduce a number of Colombian forest scenes, in exact detail, for the museum, using the birds which they obtained, thus bringing the wilds back to civilization.

Another interesting companion for a part of the voyage was an American orchid collector. He had been in the country the year before and was returning to secure a second lot of air plants. He told me that he had had no difficulty in securing the rare plants. His method of working was to show the Indians a sample of the exact flower desired, naming the price he would pay, and the natives would come into camp laden. His difficulty was that of transporting the plants, and indeed practically everything in the country is inaccessible. The plants were carried on the backs of Indians for long distances to the river ports and shipped to England and America. He said he had caused some 4,000 trees to be felled to secure 10,000 plants and had recently sold one of the rarest for \$6,000.

The vanilla bean of commerce, it seems, is an orchid, and is the only one of the family which produces anything of value outside

TYPES OF NATIVES ENGAGED IN
HUNTING ORCHIDS,
COLOMBIA.

INDIANS OF THE INTERIOR OFTEN EMPLOYED IN HUNTING ORCHIDS.

of the blossom. He said that some of his Indians in the past season declared that, in one part of the forest, the perfume from the orchids was so strong as to overpower many who entered. While he did not take much stock in the yarn, he intended to investigate the region himself.

We passed many rubber trees which were tapped, but many grow so far from the river that their exploitation has not been undertaken. Last year less than \$400,000 worth of rubber was exported.

There is a great demand for *cariniana* wood, which is known to us as "Colombian mahogany." It is not a mahogany at all, being of an altogether different family; but, of the twenty and more woods used as a substitute, it is by far the best imitation. It does not warp or shrink, is beautifully figured and takes a high polish, hence there seems no reason why it should not be employed for all the purposes for which true mahogany is used. The great popularity of the true mahogany as a furniture and finishing wood has caused a steady depletion of the available supply. Few realize that the consumption of material passing as mahogany in the markets amounts to forty million feet per annum, while the cut of true mahogany is only eighteen million feet. Also all about the Caribbean a great deal of cedar is cut and shipped to the United States to be used in the manufacture of cigar boxes.

To those who appreciate really fine coffee, that obtained in Colombia, even on the river steamers, is a revelation. It is delicious and is served at all hours. There is not one department in the republic in which coffee is not grown. It is the leading product, valued last season at \$6,000,000. All the tobacco grown goes to Germany (\$500,000 worth) and the vegetable ivory to Germany and the United States.

Over \$800,000 worth of so-called "Panama" hats were woven in Colombia in 1911, and we Americans wore practically all of them. The salt monopoly belongs to the Government and, next to the custom dues, is the most important item on the "receipt side" of the budget. The coast districts produce salt by evaporation, but the main source of supply is Cipaquia, about thirty miles from Bogotá. Here 12,000 tons of rock salt are mined annually.

Formerly the Government owned the hides on all cattle killed in the country, but this law has been abolished, the Government now placing a head tax on all cattle killed or exported; \$1,500,000 worth of cattle and hides were exported in 1911.

I found Bogotá most attractively situated on a high plain overshadowed by mountains. The climate is ideal, save for an occasional fog straying up from the lower valleys. At 9,000 feet above the sea level, the heart works at extra speed in the

PRESIDENT'S PALACE, BOGOTÁ, COLOMBIA.

rarefied air, and the human machine wears out quicker than with "lowland folk." Very old people are seldom seen here.

The population is about 130,000 and the negro blood, so well represented in the coast cities, is not often met with in the capital. The city has a national university, an observatory, a picture gallery and several learned institutions. It has the reputation of being the most cultured of the South American cities—the Boston of the other half of America—and possesses a distinct national literature of its own.

STATUE OF BOLIVAR IN INDEPENDENCE PARK, BOGOTA, COLOMBIA.

The name Bogotá is from "Bacatá," the old capital of the Chibchas which the founder, Quesada, discovered about twelve miles from the present city. The Chibchas, or Muyscas, the ancient inhabitants of these highlands, were among the most civilized tribes of the New World prior to the Conquest. Although not so far advanced as the Quichuas, or Incas, of Peru, they constructed paved highways, threw bridges across chasms, erected stone shrines to their gods, carved stone effigies, were skilled weavers and potters, and even used currency in the form of gold disks. They perhaps excelled all other tribes in the working of gold into fantastic ornaments—work which is admired today in many of our great museums. In Bogotá and throughout the uplands of Colombia I saw many Indians of Chibcha blood, but they have lost their ancient language and speak Spanish.

Until recently the journey to Bogotá was made by saddle from the river, and the inaccessibility of the city helped to preserve its peculiar charm. It now has many up-to-date improvements and has recently acquired possession of the electric street railway, installed some years ago by American capitalists from

New Jersey. The original rate of fare on this road was five cents, but as paper money dropped in value the American company secured permission from the President of Colombia to advance the rate in paper to keep it up to the former value. Then the excitement began !

MUNICIPAL THEATER, BOGOTÁ, COLOMBIA.

First the motormen and conductors were taken from the cars and rolled in the mud. All the car windows were broken and the tracks torn up. Then the populace moved on to the office of the managers of the line. Here the United States minister to Colombia stepped in and checked the mob bent on murder. The managers, finding it impossible to operate a line without motormen, conductors or tracks, packed their grips and started for the office of the State Department in Washington, D. C. After a long delay, the city of Bogotá bought the American line for \$800,000, and the municipality now sells tickets at the lowest price on record. Municipal ownership advocates should keep an eye on the capital of Colombia.

CALLE REAL, A PRINCIPAL STREET IN BOGOTA, COLOMBIA.

The great waterfall of Tequendama, about twenty miles from the city, is the best known "natural show" in the country. The rim of the basin which once formed a great highland lake here is pierced by a river which has forced its way through the hills. For three or four miles it bounds and foams in rapids and then hurls itself down in one tremendous leap of nearly 500 feet, three times the height of Niagara.

While Colombia's agricultural and forest products lead at present in value, there is no doubt but that the future will show her vast mineral deposits to be her greatest asset. Even at present the mineral production is important. Over \$3,000,000 worth of gold was produced in 1911. It is estimated that over \$600,000,000 worth of gold and silver has been taken out since the Conquest.

Platinum was first discovered in Colombia, and the country's output in this metal is now second only to Russia. It is found mixed with gold. Copper ores are abundant, and when better methods of transportation are provided, the country will rank

as a great copper producer. Coal is being mined in many sections of the republic and Bogotá itself rests on an enormous coal deposit.

Petroleum deposits are extensive and conveniently located, fortunately. A marble deposit covering many square miles has recently been discovered near Santa Marta on the Caribbean. This solid mountain of marble, equal to the Italian product, rises from the very seashore, and is the largest unworked high-grade field of its kind in the world. But above all, Colombia is famed for its emeralds. Nearly all the emeralds mined today are from this country. The Chibchas of old mined emeralds here and greatly prized these gems.

Among the many reported sites of the city of El Dorado, where the "gilded man" ruled, the shore of Lake Guatavita, some thirty miles from Bogotá, seems the most likely. The legend relates that the chief of the tribe was smeared with a resinous substance and powdered with gold dust. On a raft heaped with gold and emeralds he was towed to the center of the sacred lake, where, amid the joyous cries of his subjects, he offered the tribute of golden ornaments and gems to the gods who dwelt beneath the waters. An English company has recently dredged this very lake and recovered, so they say, some of the treasure. I rather suspect it is a "salted" lake.

While emeralds are found in Siberia and in India, Colombia supplies ninety per cent of the world's demand. The Government owns the mines and has leased them to an English company for twenty years. The Muzo group, which are the most important, are difficult of access, situated seventy-five miles from Bogotá. Of the area of 140,000 acres, only fifty have been exploited, so we shall not "run out of emeralds" for many a year to come.

Other groups of mines worked by the ancients are also held by the Government for future exploitation. Colombia's emerald mines have repeatedly been placed in pawn by the Government in Europe as security for foreign loans. The Muzo mine is situated in the bowl of an extinct volcano. Laborers with crow-bars break out the face of the crater leaving a trail of green quartz which contains the crystals. The quartz is cut with the greatest care, for the gems found in the matrix are most fragile.

A NATIVE VILLAGE IN THE INTERIOR OF COLOMBIA

The *débris* is then dropped into a sluiceway, the water drained off and the sediment searched for the deep green gems. It was just in this method that the most valuable emerald ever discovered was mined. It is a perfect six-sided crystal weighing nine ounces and belongs to the Duke of Devonshire. The famous Hope emerald, weighing six ounces, also came from Colombia. The Government has declared it unlawful to hold uncut emeralds, hoping in this way to maintain the monopoly, but this will be a difficult matter, as stones are sometimes found on private property.

JUANCHITO MARKET, LOADING ANIMALS FROM Balsa, OR
BAMBOO, RAFTS, ON CAUCA RIVER, COLOMBIA.

On leaving Bogotá, I did not return to the coast via the Magdalena, but rode over to the west to the Cauca Valley where there is a charming little town called Cali founded by the Spaniards in 1536. To the south, reached by overland travel, is Medellín, an important city, the center of the gold interest. From Cali I reached the Pacific coast by rail, sailing homeward bound from the port of Buenaventura, the only town of any importance on the western seaboard.

So here I reluctantly take leave both of the reader and of

South America. For the time and attention given me by the former, I can only say, as one does after delivering a banquet speech, "Ladies and gentlemen, I thank you;" to the latter, and the people who have framed its republics, I admiringly "take off my hat." Yours is a mighty continent, one of the Creator's greatest pieces of handiwork, and I predict that you will not fail to reach in final development the highest standard of prosperity and civilization.

As a last word to the reader, I would like to say that I am organizing an expedition to visit and investigate our lately acquired American colonies—Porto Rico, Panamá, Hawaii, Guam, Samoa, the great Philippine group of islands; also our dependencies, Cuba, Haiti and Santo Domingo. These collectively comprise some 3,600 islands and over 500,000,000 acres of land. With photographs and recorded observations of life and scenes in these colonies and dependencies, it is my purpose to produce during 1913 a companion volume to this book which I hope may prove welcome and valuable to American readers.

